

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
NORTHERN DIVISION

SEVERN PEANUT CO., INC.,)	
MEHERRIN AGRICULTURE &)	
CHEMICAL CO., and TRAVELERS)	
PROPERTY CASUALTY COMPANY OF)	
AMERICA as Subrogee of Severn)	DOCKET NO. 2:11-cv-00014-BO
Peanut Co., Inc. and Meherrin)	
Agriculture & Chemical Co.,)	
)	
Plaintiffs,)	
)	
v.)	
)	
INDUSTRIAL FUMIGANT CO. and)	
ROLLINS INC.,)	
)	
Defendants.)	
)	

8:54 A.M.
October 10, 2013
Raleigh, North Carolina

DEPOSITION

OF

CAROL L. JONES, Ph.D.

REPORTED by: Laura Riley Bridges
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EXHIBIT

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* * * * *

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T A B L E O F C O N T E N T S
E X A M I N A T I O N S

WITNESS	EXAM	BY WHOM	PAGE NO.
Carol Jones	Direct	Mr. Howard Widis	7

T A B L E O F C O N T E N T S
E X H I B I T S

EXHIBIT	DESCRIPTION	PAGE NO.
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Exhibit 322	Fumigation Manual	138
Exhibit 323	Photograph	150
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E X H I B I T S
P R E V I O U S L Y M A R K E D **

EXHIBIT	DESCRIPTION	PAGE NO.
Exhibit 22	Photograph	183
Exhibit 23	Fumigation/Fogging Service Report	125
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Exhibit 213	Dr. Jones' Expert Report	9
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**Retained by Mr. Widis.

This is the deposition of CAROL L. JONES, Ph.D. being taken by Notice issued by counsel for the Plaintiffs, by consent of counsel for the parties and in accordance with Rules 26 and 30 of the North Carolina Rules of Civil Procedure, before Laura Riley Bridges, Verbatim Reporter and Notary Public, in the offices of Poyner Spruill, LLP, 301 Fayetteville Street, Suite 1900, Raleigh, North Carolina 27601, on the 10th day of October, 2013, beginning at 8:54 a.m.

* * * * *

STIPULATION

It is stipulated and agreed, by and between the parties to this proceeding, that all questions are deemed objected to and that a motion to strike is made as to all answers, which objections and motions to strike may be ruled upon at an appropriate time by the Court, except that objections as to the form of the questions shall be lodged at the time the questions are propounded to the witness.

1 CAROL L. JONES, Ph.D., being first duly
2 sworn was examined and testified as follows:

3 D I R E C T E X A M I N A T I O N BY MR. WIDIS:

4 Q. Would you state your name, please?

5 A. Carol L. Jones.

6 Q. And it's Dr. Jones?

7 A. Dr. Jones, yeah.

8 Q. Dr. Jones, my name is Howard Widis, we've met outside.

9 A. Yes, we did.

10 Q. I'm the attorney representing Meherrin Agriculture,
11 Severn Peanut, and Travelers in the lawsuit that has
12 been filed against the Industrial Fumigant Company and
13 Rollins. I'm going to be taking your deposition today.
14 Have you ever had your deposition taken before?

15 A. Yes. Two weeks ago.

16 Q. Okay. And it -- how many times prior to that?

17 A. None.

18 Q. First deposition was two weeks ago?

19 A. Yes.

20 Q. And what type of case was that?

21 A. A grain bin collapse.

22 Q. And were you an expert witness in that?

23 A. Yes.

24 Q. Okay. And who were you representing in that case?

25 A. Martinek Grain in Celina, Texas.

1 Q. And what were the circumstances of -- of that case?

2 A. Of course, it's still an ongoing case, but they had a
3 grain bin failure and the insurance company failed to
4 pay for the -- the property damage.

5 Q. All right. So is that a claim against the insurance
6 company --

7 A. Yes.

8 Q. -- for payment?

9 A. Yes.

10 Q. All right. I take it you had an opportunity to speak
11 to Mr. Epstein about the deposition process?

12 A. Yes.

13 Q. And you now have been through it once before so I'll
14 just repeat some of the preliminary instructions --

15 A. Okay.

16 Q. -- and just so to make sure we're on the same page
17 here. I'll be asking you questions. You're going to
18 need answer yes or no or -- or verbally because the
19 courtroom reporter's trying to take these down. I will
20 try very hard not to talk over you and if you would do
21 the same and try not to talk over me, it makes a nice
22 clean record for -- for the court reporter, then. If
23 you don't understand my question, please ask me to
24 rephrase it or tell me so. Sometimes I confuse myself
25 even.

1 A. Okay.

2 Q. If you want to take a break at any time, please just
3 let me know. We're happy to accommodate you. We
4 probably ask that you answer the question that's on the
5 table at that point, but we'll be -- I'll be glad to
6 take a break. All right?

7 A. Okay.

8 Q. I'm going to hand you -- I don't believe your report
9 has been marked as an exhibit.

10 MR. EPSTEIN: Hold on. I think it has. It
11 has, 213.

12 (WHEREUPON, Exhibit Number 213 previously
13 marked for identification was passed to
14 the witness for review)

15 BY MR. WIDIS:

16 Q. Okay. We're going to -- I'm going to hand you your
17 report which has been previously marked as Exhibit 213
18 and ask you if you can identify that?

19 MR. WIDIS: Would you like another copy,
20 Steve?

21 MR. EPSTEIN: No, thank you.

22 MR. WIDIS: Okay.

23 THE WITNESS: Yes, sir. That's my report.

24 BY MR. WIDIS:

25 Q. Okay. I'd like to start with your background so if you

1 would turn to page 22 of your report, which I believe
2 starts your CV.

3 A. Okay.

4 Q. I see you received a bachelor of science and
5 agricultural engineering at Oklahoma State University?

6 A. Yes, sir.

7 Q. 1977.

8 A. Yes, sir.

9 Q. Is that right?

10 A. Yes, sir.

11 Q. Okay. If you would, give me your work history from the
12 time that you graduated from Oklahoma State in 1977
13 through the present.

14 A. Okay.

15 Q. And I believe you've -- you've put that --

16 A. It's on page 23.

17 Q. -- on 23.

18 A. Let's see, it begins on page 24 actually, it runs
19 backwards. I was hired as a design engineer and
20 promoted to marketing manager at Worthington Pump
21 Company.

22 Q. Okay. And what is Worthington Pump?

23 A. They were a manufacturer of vertical turbine pumps that
24 supplied equipment to the oil field, to agriculture, to
25 city municipalities and military.

1 Q. And what did you do for Worthington Pump?

2 A. Design engineer.

3 Q. Did your responsibilities have anything to do with
4 fumigating agricultural commodities at Worthington
5 Pump?

6 A. No.

7 Q. Did they have any -- did your responsibilities have
8 anything to do with aluminum phosphide or any fumigants
9 at Worthington Pump?

10 A. No.

11 Q. Okay. And before we get to that I'm going to take you
12 back again because I do want to ask you what you did
13 with -- at Oklahoma State University with Dr.
14 Brusewitz?

15 A. Brusewitz, yes.

16 Q. Okay. Did I pronounce that right?

17 A. Yes, you did.

18 Q. Good. What -- what did you do with him? What role did
19 you play in his research?

20 A. I was a lab assistant for him and we determined
21 physical properties of different grain and biological
22 products, mostly grain.

23 Q. Okay. Now did Dr. Brusewitz deal with peanuts as
24 well?

25 A. We did -- yes, we did some work with peanuts actually.

1 Q. Okay. And what did you do with peanuts?

2 A. We were developing a color sorter to handle blanched
3 peanuts and that color sorter would have been able to
4 detect whether they had -- the skins had been removed
5 from them. Also would have been able to detect any
6 damage to the peanuts and the quality of the peanuts.

7 Q. Okay. Did your work with Dr. Brusewitz have anything
8 to do with the storage of peanuts?

9 A. Yes.

10 Q. And in what respect was that?

11 A. It would determine whether the peanut had been stored
12 properly by the characteristics of the peanut itself
13 and we were developing a sensor that would -- could do
14 that.

15 Q. What type of peanuts were those?

16 A. They were Spanish peanuts.

17 Q. Okay.

18 A. That's all I remember.

19 Q. Okay. Did you work at all with Virginia?

20 A. No.

21 Q. Peanuts? No. And how many years did you work with Dr.
22 Brusewitz?

23 A. Four years.

24 Q. Did your work with Dr. Brusewitz deal with spontaneous
25 combustion --

1 A. No.

2 Q. -- of peanuts?

3 A. No.

4 Q. Okay. And it -- and what I'm going to ask you to do is
5 wait for me to finish the question and then --

6 A. I will do that.

7 Q. Okay. So why did you leave Worthington Pump?

8 A. I was given an opportunity to go to work in the oil
9 field as a design engineer for W.L. Somner Company. I
10 had reached my potential for advancement at Worthington
11 Pump, that was a family-owned company at the time.

12 Q. What did you do for Somner Company?

13 A. I was a design engineer. They also put together
14 pumping packages.

15 Q. And what type of things did you design?

16 A. Pumping packages for the oil field.

17 Q. Okay. And did your duties or responsibilities or
18 training at Somner involve fumigating agricultural
19 products?

20 A. No, sir.

21 Q. So is it accurate up to that time -- up to the time you
22 were with Somner you had no training or experience with
23 fumigating agricultural products?

24 A. Yes, sir.

25 Q. And you left Somner, according to your report, in 1984,

1 I believe. Is that right?

2 A. Yes.

3 Q. What did you do then?

4 A. I returned to the farm, my family's farm and became the
5 manager for Boeckman Farms.

6 Q. What kind of farm is that?

7 A. Cereal grains and cattle and hay crops.

8 Q. Do you grow peanuts on Boeckman Farm in --

9 A. No.

10 Q. And you were manager of the farm, is that what -- is
11 that what --

12 A. Manager and owner.

13 Q. Manager and owner. Okay. How many people work for
14 you?

15 A. One person.

16 Q. And who was that?

17 A. A person that I hired. Yeah.

18 Q. Okay. So it was you and -- and a person that you
19 hired?

20 A. Yes.

21 Q. How big a farm is Boeckman?

22 A. Four hundred acres at that time.

23 Q. I know it's difficult to hold back talking and it's --
24 I realize question and answer is not the way most
25 people converse so this is --

1 A. I'm sorry, I thought you were done. Okay, I will wait.

2 Q. I just would ask -- it will just make it very hard on
3 the court reporter --

4 A. Okay.

5 Q. -- unless we give each other time to respond. Okay.
6 How big is Boeckman Farms now?

7 A. One hundred and sixty acres.

8 Q. And what kind of commodities do you grow there?

9 A. Rye and cattle.

10 Q. Were you involved in the fumigation of agricultural
11 commodities while you were manager of Boeckman Farm?

12 A. Yes.

13 Q. Okay. And what did you do?

14 A. We fumigated our on-farm storage.

15 Q. And how did you fumigate it?

16 A. With phosphine tablets.

17 Q. Did you do that yourself or did a certified applicator
18 do that?

19 A. A certified applicator.

20 Q. Okay. Do you know what kind of tablets were used?

21 A. Fumitoxin, I believe.

22 Q. Did you participate in the fumigation?

23 A. I watched.

24 Q. And your report says you were -- I see next, the tech
25 coordinator -- well, you're manager of -- of your

1 family farm, what's the next position you had, although
2 I understand you probably maintain your position with
3 the -- with the farm during this entire time?

4 A. Yes. From 1994 through '99, and 2001 through 2002, I
5 worked for Dover Public Schools as a technology
6 coordinator as well as farming, and I also taught
7 secondary math.

8 Q. Okay. And where is Dover?

9 A. Central Oklahoma.

10 Q. Was that near the family farm?

11 A. Yes.

12 Q. Okay. And how -- what's the population of Dover?

13 A. Small, maybe 200 people.

14 Q. Did any of your responsibilities with the Dover Public
15 Schools involve teaching fumigation of agricultural
16 commodities?

17 A. No, sir.

18 Q. Okay. And I see there's a gap between 1999 and 2001,
19 where you weren't working for the Dover Public School?

20 A. Correct.

21 Q. And who were you working for at that time?

22 A. Oklahoma Department of Career and Technology Education.

23 Q. And what did you do for them?

24 A. I was a network coordinator.

25 Q. What does that mean?

1 A. I managed some software and designed software for their
2 career information system.

3 Q. Did any of your work there at the Oklahoma Department
4 of Career Technology Center involve fumigating
5 agricultural products?

6 A. Other than taking information from that industry and
7 instituting it into the software, no.

8 Q. After you left the Oklahoma Department of Career, where
9 did you go?

10 A. I went back to Dover Public Schools.

11 Q. And then you were there through 2002?

12 A. Yes.

13 Q. All right. And then where did you go?

14 A. Oklahoma State University.

15 Q. And why did you do that?

16 A. I was offered a position as a full-time research
17 engineer and it gave me the opportunity to finish my
18 Ph.D.

19 Q. And you were there doing what type of work while you
20 were doing your Ph.D.?

21 A. Well, my Ph.D. was on the side of being a research
22 engineer.

23 Q. Okay.

24 A. The research engineering position was to work with
25 different crops in storage and to develop sensors to

1 determine the way they were stored, the quality of
2 those crops, the reflectance space sensing sensors to
3 determine storage quality.

4 Q. And did that involve -- did your work there as a
5 research engineer at the -- at the Oklahoma State
6 involve fumigating the agricultural commodities?

7 A. That was probably the maintenance of our products that
8 we used, yes.

9 Q. Okay. Did you participate in the fumigation of the
10 agricultural products?

11 A. Yes.

12 Q. Okay. Were you -- were you a certified applicator?

13 A. No. I was a research -- as a researcher I don't have
14 to be a certified applicator to work with phosphine;
15 however, we had technicians that are certified.

16 Q. So you actually did distribute and broadcast the
17 tablets?

18 A. Yes, sir.

19 Q. Okay. Did you work as a research engineer with
20 peanuts?

21 A. We had one -- one study, yes, on peanuts.

22 Q. All right. Well, tell me about that study.

23 A. I can't tell you all the details but we were -- it was
24 with Golden Peanut Company to look at some -- some
25 alternative fumigation processes for their facility in

1 Oklahoma.

2 Q. What type of -- were you requested to look at
3 alternative fumigation processes --

4 A. Yes.

5 Q. -- by Golden Peanut? Did they express any concern
6 about the way it was being fumigated prior?

7 A. No, sir.

8 Q. Do you know why they wanted you to come up with
9 alternative fumigation processes?

10 A. They were looking for a method to -- to non-chemically
11 control insects.

12 Q. Did you come up with something?

13 A. Yes, sir.

14 Q. Did -- did you write a report on that or --

15 A. No, sir.

16 Q. Okay. Are you able to tell me what -- what fumigation
17 process you devised --

18 A. No, sir.

19 Q. -- that didn't use chemicals?

20 A. No, sir.

21 Q. Why not?

22 A. Because we signed a non-disclosure agreement with
23 Golden.

24 Q. Okay. Well, I'm not going to pry, it's -- but you did
25 come up with something and --

1 A. Yes.

2 Q. -- that's now confidential information in the hands of
3 Golden Peanut?

4 A. Yes, sir.

5 Q. Is that right? Okay. Then you've been an assistant
6 professor at Oklahoma State from 2006 to 2011, an
7 associate professor from 2011 to the present? Is that
8 right?

9 A. That's correct.

10 Q. And as of right now you're an associate professor?

11 A. Yes, sir.

12 Q. Okay. During any of your positions did any of these
13 give you training in the origin and -- in the
14 investigation of the origin and cause of fires?

15 A. No, sir.

16 Q. Do you have any experience in determining the origin
17 and cause of fires?

18 A. No, sir.

19 Q. Now you've been retained as an expert witness prior to
20 this one. I think you've mentioned this. How many
21 times prior to this case here have you been retained as
22 an expert witness in a litigation?

23 A. Five times. However, three of -- well, including this
24 one -- three of those I gave information and there was
25 never a deposition and it never went to trial.

1 Q. And then the fourth one would have been where you gave
2 the deposition two weeks ago?

3 A. Yes.

4 Q. And then this one?

5 A. And this one.

6 Q. The three that you didn't give a deposition, can you
7 tell me what they -- what you were hired to do in those
8 cases?

9 A. To give information about the proper storage of cereal
10 grains in all three of them.

11 Q. Were you asked in any of those three to determine the
12 origin and cause of a fire?

13 A. No, sir.

14 Q. I'm going to hand you what we're marking as Exhibit
15 320.

16 (WHEREUPON, Exhibit Number 320 was marked for
17 identification and passed to the witness
18 for review)

19 BY MR. WIDIS:

20 Q. I know this hasn't been identified yet so if you could
21 take a look at that and just tell me what it is?

22 A. Those are the invoices that I sent to Mr. Epstein for
23 this account for my work.

24 Q. And does it accurately reflect the work that you did up
25 through September 30, 2013?

1 A. Yes, sir.

2 Q. Are there still outstanding charges as of today? In
3 other words, have you been paid the \$17,483.10 that's
4 on that September 30, 2013 invoice?

5 A. I've not received \$3,000 of it.

6 Q. When were you first retained as an expert in this case?

7 A. It would have been in February of 2012.

8 Q. Who contacted you?

9 A. Mr. Epstein.

10 Q. And what were you asked to do?

11 A. To provide information and my opinions and conclusions
12 about the storage practices of Severn Peanut Company
13 and the fumigation that was conducted by IFC in August
14 of 2009.

15 Q. Were you retained to give any opinion as to the origin
16 and cause of the fire?

17 A. No, sir.

18 Q. And am I correct that you are -- don't feel qualified
19 to give an opinion as to the origin and cause of the
20 fire?

21 A. I am not a fire expert.

22 Q. And so, yes, you're -- you don't feel you're qualified
23 to give an opinion as to the origin or cause of the
24 fire, is that correct?

25 A. That's correct.

1 Q. Do you recall what documents you were sent by Mr.
2 Epstein when you first got the case? I don't need a
3 detailed list, I'm just trying to get a feel for what
4 you received.

5 A. I received the -- gosh, that was a long time ago -- I
6 received information about the -- the dimensions and
7 the architecture of this dome, I received the
8 fumigation information, the FMP, fumigation documents.
9 And that's all I can remember at this moment that I
10 received at that time.

11 Q. Did you receive any deposition transcripts?

12 A. Not at that time.

13 Q. Let me show -- get this marked as 321.

14 (WHEREUPON, Exhibit Number 321 was marked for
15 identification and passed to the witness
16 for review)

17 BY MR. WIDIS:

18 Q. I'd like you to take a look at that. We're going to go
19 over these, but I want you to just briefly just take a
20 look and identify what those -- what that document --
21 what Exhibit 321 is?

22 A. These are my handwritten notes that exist as I reviewed
23 some of the documents sent to me for this case.

24 Q. Are there other notes that you haven't produced?

25 A. No, sir.

1 Q. Do you have any documents in your file that you have
2 not turned over to Mr. Epstein?

3 A. No, sir.

4 MR. EPSTEIN: Well, just to make it clear, I
5 have not asked Dr. Jones to turn over
6 any communications that she has had with
7 me based upon our agreement.

8 MR. WIDIS: No, and that I fully understand.

9 BY MR. WIDIS:

10 Q. There are no other notes, reports, records that you
11 have that you haven't turned over to Mr. Epstein, is
12 that right?

13 A. No, sir.

14 Q. Are these -- you've numbered 1 through 30, and then I
15 believe there's other notes afterwards. Is 1 through
16 30 -- are those in any chronological order?

17 A. No, sir. Those are pages out of my Moleskine planner.

18 Q. When did you write the page number on the bottom?

19 A. When I bought the planner four years ago.

20 Q. So is it -- did you start on page 1 and take notes?

21 A. No.

22 Q. All the way to 30? You jumped around within the
23 planner?

24 A. Yes.

25 Q. Okay. We're going to go through it, 1 through 30 --

1 A. Okay.

2 Q. -- and then you can tell me what we're looking at here,
3 all right? Page 1 looks like documents from -- that
4 you received from Mr. Epstein. You received them on
5 April 2nd, 2013 -- I'm sorry, May 2nd, 2013, is that
6 right?

7 A. Correct.

8 Q. Okay. And that would have been -- this looks like you
9 might have gotten the breakdown of the time -- of the
10 analysis of a timeline?

11 A. Yes.

12 Q. Okay. All right. If you turn to the second page
13 because we're not -- we're not going to go over every
14 note, just have a few questions, ones that I just want
15 to make sure I understand.

16 A. Okay.

17 Q. About the fifth line down you have, "Series of
18 plateaus, flattened areas, valleys, ridges, slopes
19 across surface of peanuts." What were you referring to
20 when you wrote that?

21 A. That was reported -- that was reported in one of the --
22 one of the documents and I have to -- by my notes here
23 it looks like it was in Mr. Richards' document.
24 Apparently, they were describing what they thought was
25 the -- the surface of this pile of peanuts.

1 Q. Okay. Do you believe that's an accurate description of
2 the surface of the pile?

3 A. I don't know because I didn't see the surface of the
4 pile.

5 Q. Turn, if you would, to page 4. And this says, "Exhibit
6 3, Steve Brown." You've got Steve Brown, then on the
7 right it says -- you have a star -- "unprofessional in
8 statements, personality and integrity assumptions &
9 unsubstantiated statements on conjecture." What did
10 you mean when you said -- I take it you're referring to
11 Dr. Brown or his report?

12 A. I was referring to his report. That was my personal
13 impressions as I read the report.

14 Q. Okay. And your personal impressions were, it was
15 unprofessional in statements?

16 A. Yes, sir.

17 Q. Okay. Why do you say that?

18 A. He didn't -- from an academic -- from an academic
19 viewpoint -- which he's an academic person, he's a
20 professor -- he didn't provide -- he didn't provide
21 citations and references for his statements or evidence
22 to back up his statements and from an academic
23 viewpoint, that's unprofessional.

24 Q. Okay. Do you believe Dr. Brown was -- was writing a
25 report to meet academic standards?

1 A. I don't know.

2 Q. But you have called him unprofessional and in front a
3 jury you're going be having called him unprofessional.

4 A. Yes, sir.

5 Q. Do you believe Dr. Brown is unprofessional?

6 A. I believe his report was unprofessional.

7 Q. What do you mean "unprofessional in personality and
8 integrity assumptions"? What does that mean?

9 A. The flavor of the report -- the personality and the
10 flavor of the report was -- it made assumptions, it
11 questioned the integrity of -- of the application.

12 Q. The integrity of the applicator or the application?
13 I'm -- I'm just --

14 A. Of the application.

15 Q. Of the application. Okay. Down on page 4, you have
16 "Sour grapes about integrity...personal opinion at best
17 about fumigator memory!!!" What did you mean by that?

18 A. My opinion of his writing was that it sounded like sour
19 grapes. It was a negative report. It was a personal
20 opinion about the fumigator's memory. He showed no --
21 he showed no data or any proof of the statement that he
22 made.

23 Q. Had you read Randy Turner and Brian Lilley's deposition
24 transcripts prior to reading Dr. Brown's report?

25 A. Yes, sir.

1 Q. Do you have an opinion as to the memory that Randy
2 Turner had when he gave his deposition?

3 A. No, sir.

4 Q. Okay. You don't think he perhaps answered "I don't
5 know," or "I don't remember" quite a number of times?

6 A. He answered that, yes.

7 Q. Okay. Do you not feel that someone could comment on
8 his lack of memory in a report?

9 A. I don't know. Dr. Brown was making the comment, not
10 me.

11 Q. Okay. You've got at the bottom, "Commodity" -- I take
12 it "MC" is moisture content?

13 A. Yes, sir.

14 Q. Okay -- "isn't required by law to be recorded (not what
15 makes gas anyway)." "RH" -- I take it is relative
16 humidity -- "is."

17 A. Yes, sir.

18 Q. And just so I understand the comment, moisture from the
19 commodity can actually activate the aluminum phosphide
20 tablets, can't it?

21 A. It does that by transferring moisture into the air
22 which causes relative humidity changes.

23 Q. But you -- there is enough moisture in the commodity
24 itself, isn't there?

25 A. Not always.

1 Q. But there can be?

2 A. It's possible.

3 Q. I mean, your -- the fumigation manual from Oklahoma
4 State talks about that, doesn't it?

5 A. Yes.

6 Q. Okay. And it says that the moisture content from the
7 commodity can actually activate the fumigant, doesn't
8 it?

9 A. By changing the relative humidity of the air.

10 Q. On page 6, or in the middle, "Notes on Brown's Resume -
11 most Pubs are plant Pathology pubs & most are 10+ years
12 old." What point were you making there?

13 A. I simply made the observation that most of his
14 publications are on plant pathology and it appeared
15 that most of them were over ten years old.

16 Q. Okay. And do you feel that somehow caused his report
17 to be less persuasive?

18 A. No, sir.

19 Q. It was just a comment you were making as you were
20 reading?

21 A. Yes, sir.

22 Q. On page 7, we've got "In report 3 things should be
23 covered, 1) Lilley and Turner testimony, did they
24 follow legal & appropriate practice. Be specific w/
25 references." What does that mean when you wrote that

1 note? What were you telling yourself?

2 A. This was the recap of a phone call that I had with Mr.
3 Epstein and these were notes to myself that I wanted to
4 -- to cover in my review and in my report. Also, I
5 wanted to go over Mr. Lilley and Mr. Turner's
6 testimony. I wanted to look to see if they followed
7 the legal and appropriate practice and then if I found
8 either positive or negative in that I wanted to be
9 specific and make references to it.

10 Q. Okay. So was it your intention, then, when you write
11 your report if you saw something negative to put that
12 in your report about the practices of Mr. Lilley or Mr.
13 Turner?

14 A. Yes, sir.

15 Q. Okay. Do you think you did that?

16 A. Yes, sir. I also put positive things in there.

17 Q. Number 2 says, "Point to how SP" -- I think that must
18 be Severn Peanut?

19 A. Yes, sir.

20 Q. Okay. "Point to how Severn Peanut storage practices
21 were bad & what risk is posed when these bad practices
22 happen." What did -- what were you telling yourself
23 there?

24 A. I wanted to determine if they had practices that were,
25 in fact, non-conducive to good storage of the peanuts

1 and the -- and if it posed any risk when those things
2 happen, I wanted to be sure and summarize that.

3 Q. Now was it your understanding when you were retained
4 that you were supposed to look for things that Severn
5 Peanut had done improperly?

6 A. I wanted to investigate how they stored those peanuts
7 and -- and assess the good and the bad things about it.

8 Q. And were you planning on putting what was done properly
9 in the report also?

10 A. If I found that, yes.

11 Q. Do you feel Severn Peanut did anything properly in
12 their storage of the peanuts?

13 A. They put them in the dome.

14 Q. Other than that?

15 A. My report shows several things that they did wrong.

16 Q. "3) Refuge last 4 testimonies w/fact & reference & ID
17 discrepancies in testimonies of 'theirs' and (ours)."
18 What does that mean?

19 A. I wanted to go through last four testimonies and --

20 Q. Let me stop you for a second, what do you mean by
21 testimonies?

22 A. Probably depositions, the Lilley and Turner testimony,
23 which would be depositions at this point, and I don't
24 remember what other two that I was referring to here.
25 That I want to compare to make sure we identified any

1 discrepancies between those two testimonies and
2 whatever the other two were. And I don't have those
3 written here. Just identify discrepancies.

4 Q. And did you do that in your report?

5 A. I don't believe I did.

6 Q. Okay. And why not?

7 A. I -- it probably wasn't relevant to -- to my goal in
8 -- in my assignment.

9 Q. Page 9. This is a continuation, it says, of -- well, I
10 see it's -- this is where you wouldn't be going in
11 order then, I guess, page 8 and then page 9, because it
12 says, "(Ryman cont)" on the top so --

13 Page 9 is -- are these comments from the Ryman
14 deposition? In other words, are these comments that
15 you made while you were reading Mr. Ryman's deposition
16 transcript?

17 A. Yes, sir.

18 Q. Page -- second line, "pg 92, No definition of a 'pile'"
19 and then you have three exclamation points. So what
20 did that mean to you? Why did you write that down?

21 A. I found on page 92 that there was a reference to a pile
22 and I saw no definition of a pile, what constitutes a
23 pile.

24 Q. Do you have a definition of what constitutes a pile of
25 aluminum phosphide tablets?

1 A. No, sir.

2 Q. Do you have an idea in your mind what would constitute
3 a pile?

4 A. No, sir.

5 Q. No idea?

6 A. No idea.

7 Q. Do you understand that when you apply aluminum
8 phosphide tablets you're not supposed to pile or stack
9 it?

10 A. That's what the label says, yes.

11 Q. Is that -- do you agree with that?

12 A. That's what the label says. That's the law.

13 Q. Okay. Well, you as a fumigator, do you believe you
14 should -- that it's all right to stack a pile of
15 tablets of aluminum phosphide tablets?

16 A. It's not all right to do anything against the label.

17 Q. And the label says do not stack or pile the tablets,
18 correct?

19 A. That's correct.

20 Q. But you don't know what a pile is?

21 A. I don't know what a pile is.

22 Q. Then we've got, line 120 -- "Goldstein keeps leading to
23 water & phosphine" -- leads a -- your -- your little
24 sign -- what was that little sign mean -- and "flames."
25 Leads to or what do you mean when you write the arrow

1 with a equal sign?

2 A. That it's -- that it leads to flames.

3 Q. Okay. And then you have again three exclamation
4 points. So what is the point you were making there?

5 A. I'd have to look at that deposition, but I'm -- as I
6 read this comment here that I wrote, Mr. Goldstein's
7 questions were leading to water and phosphine, the
8 combination of that going -- resulting in flames.

9 Q. Did you read all the deposition and have some
10 understanding of why those questions were being asked?

11 A. Yes, sir.

12 Q. And what do you believe the reason for those questions
13 were?

14 A. There was -- I'm sorry -- there was conjecture that --
15 that the water and phosphine together causes flames.
16 In fact, Mr. Ryman indicated that that can happen.

17 Q. Was it your understanding, having read the deposition
18 of Mr. Ryman that the water plays no role in the
19 ignition of the phosphine gas?

20 A. I did not understand that, no.

21 Q. Okay. Do you have an understanding of the -- of the
22 chemical properties of the aluminum phosphate?

23 A. Yes, sir.

24 Q. Okay. Do you understand what Mr. Ryman was saying
25 about how aluminum phosphide can actually cause a fire

1 without the introduction of liquid water?

2 A. I understand what he said in his -- in his deposition.
3 I'm not a chemist, I've -- I don't understand the
4 chemical reactions.

5 Q. So that -- the whole idea whether aluminum phosphide
6 can or cannot cause a fire due to piling is outside
7 your area of expertise?

8 A. Yes, sir.

9 Q. Now we have a -- further down -- "Epstein to Ryman
10 questions." And it says, "Established Ryman as DA's
11 leading expert in Phosphine application & hazards."
12 What did that -- what does that mean? What did you
13 write that down for?

14 A. Ryman is Degesch America's leading expert in phosphine
15 application and hazards. That was a question that I
16 was -- that I would ask Mr. Epstein and I'm sure that I
17 did someplace along the line.

18 Q. Now Mr. Epstein asked Mr. Ryman if he considered
19 himself an expert in the use of Phostoxin and
20 Fumitoxin, do you recall that?

21 A. No, I don't.

22 Q. Okay. Is it your understanding that Mr. Ryman
23 considered himself an expert in the application of
24 aluminum phosphide tablets?

25 A. Yes, sir.

1 Q. Okay. Do you believe Mr. Ryman is knowledgeable with
2 regard to industry standards with the application of
3 aluminum phosphide tablets?

4 A. Yes, sir.

5 Q. And do you believe Mr. Ryman's experienced in the field
6 of fumigation of agricultural phosphide tablets?

7 A. Yes, sir.

8 Q. As you sit here, did any of Mr. Ryman's comments
9 regarding the use of aluminum phosphide tablets or
10 their application seem incorrect to you?

11 A. No, sir.

12 Q. Did you agree with the answers that Mr. Ryman gave to
13 the questions that were posed to him in his deposition?

14 MR. EPSTEIN: Objection to form.

15 THE WITNESS: Yes, sir.

16 BY MR. WIDIS:

17 Q. And Mr. Ryman was asked on several occasions questions
18 regarding what a properly trained certified applicator
19 should or should not do. Do you recall those
20 questions?

21 A. No, sir.

22 Q. Well, let me ask you this. Have you read Mr. Ryman's
23 deposition that he gave as an expert witness?

24 A. Yes, sir.

25 Q. Yeah. Okay. Would you agree now that a properly

1 trained certified applicator of restricted-use
2 pesticides should have an understanding of what
3 constitutes a pile if he or she saw it?

4 A. Yes, sir. No place is it described what a pile is.

5 Q. The label says don't pile, though, right?

6 A. Yes, sir.

7 Q. But it's your belief that an applicator shouldn't have
8 an understanding in their own mind of what a pile is?

9 A. We have no scientific knowledge of what a pile is.
10 It's something that Degesch may need to address in
11 future.

12 Q. Do you think 50 tablets in a clump would be considered
13 a pile, in your opinion?

14 A. I would consider that a clump.

15 Q. Wouldn't consider it a pile or stacking?

16 A. I don't know what a stack or a pile technically is.
17 That's not a technical term.

18 Q. Would you agree that a properly trained certified
19 applicator of restricted-use pesticides should have an
20 understanding that metal phosphide fumigants should not
21 be stacked during the application process?

22 A. Could you define stacked for me, please?

23 Q. Well, stacked or piled.

24 A. I don't know what a stack or a pile technically is. We
25 don't know how many tablets that is. We don't know

1 what the diameter is, what the height is, there's no --
2 there's no scientific determination of what that means.

3 Q. So do you believe when the label says do not stack or
4 pile aluminum tablets, it really has no meaning because
5 no one knows what a pile is?

6 A. I think it's nebulous, yes.

7 Q. Do you have an understanding in your mind of what
8 they're trying to say?

9 A. Yes, sir.

10 Q. And what is it they're trying to say?

11 A. My opinion is that they should not be placed, too many
12 of them in close proximity to each other to -- to cause
13 enough concentration to reach the 18,000 parts per
14 million.

15 Q. And how many do you feel it would need to -- to be in
16 close proximity to reach that 18,000 parts per million?

17 A. There's a lot of variables that go into that
18 determination and I don't know.

19 Q. The bottom of page 9, still, we have "Application was
20 done properly." Do you agree that the application done
21 by Randy Turner and Brian Lilley at the Severn Dome on
22 August 4, 2009, was done properly?

23 A. Yes, sir.

24 Q. On page -- oh, I see, I have them backwards -- 8, we're
25 now -- my fault.

- 1 A. Okay.
- 2 Q. 8 before 9, I'm sure that was our error.
- 3 A. I have 8 before 9.
- 4 Q. Well, then it's just this one that was done. On page
- 5 75, where it's still talking about Dennis Ryman's
- 6 deposition, all right? And this is the one -- on page
- 7 75 it says, "admitted if you can't see surface, you
- 8 can't be sure of no piling - supposedly." Is that
- 9 right? That's -- I mean, is that what's written there?
- 10 A. That's what's written there, yes.
- 11 Q. Okay. What did you mean by that?
- 12 A. That was a note to myself of what he stated on page 75
- 13 in his deposition.
- 14 Q. And was your understanding that Mr. Ryman said if you
- 15 can't see the surface you can't be sure that -- you
- 16 can't see the surface of the -- of the commodity that
- 17 you're applying the applicant, you can't be sure that
- 18 you don't have piling, is that right?
- 19 A. Could you ask me that again, please?
- 20 Q. Sure. Is it your understanding that what Mr. Ryman was
- 21 saying was if you cannot see the entire surface of the
- 22 commodity that you're fumigating, you can't be sure
- 23 that you're not having piling of the tablets?
- 24 A. I understand that's what he said in his deposition.
- 25 Q. And do you agree with that?

1 A. Yes, sir.

2 Q. What did you mean by "supposedly" at the end of that?

3 A. Apparently, that's something that I observed on page 75
4 in the deposition.

5 Q. So you didn't -- that's not your term "supposedly"?

6 A. No. No.

7 Q. That's -- that's something that was taken out of the
8 transcript?

9 A. Apparently, that's not my opinion.

10 Q. Page 85 at the end of that -- that's still on the
11 bottom of page 8 where you've got three asterisks?

12 A. Okay. Uh-huh.

13 Q. "Very difficult to trap gas & exceed 18,000 parts per
14 million in his experience. Crust slows down the gas
15 out," is what I read. Is that --

16 A. That's correct.

17 Q. Okay. What did you mean when you wrote that?

18 A. That was -- that was something he stated in his
19 deposition on page 85 and I found that significant so I
20 put stars by it so I could go back and look at that.

21 Q. Okay. Do you have any understanding of what he means
22 when he says, "crust slows down the gas out," or when
23 you -- that reference?

24 A. No, sir.

25 Q. Do you know what crust you're referring to when you

1 write that down?

2 A. No, sir.

3 Q. Have you ever seen crust form on the top of clumps of
4 aluminum phosphide tablets?

5 A. No, sir.

6 Q. Have you ever seen any crust form on the top of
7 aluminum phosphide tablets that have reacted?

8 A. No, sir.

9 Q. Have you ever been into a facility that's been
10 fumigated with aluminum phosphide tablets and -- and
11 seen the residue?

12 A. Yes, sir.

13 Q. Okay. And you've never seen crusting?

14 A. Not crusting, it's a powder that's left.

15 Q. Okay. Turn if you would, to page 13. It's "Things I
16 need to do." This is a note to yourself, I take it?

17 A. Yes, sir.

18 Q. "1) Calculate the free space area." Are you talking
19 about the headspace above the pile of peanuts up to the
20 surface of the dome?

21 A. Yes, sir.

22 Q. And did you do that?

23 A. Yes, sir.

24 Q. What did you get?

25 A. I don't remember and I'm not sure it's in my notes.

1 Q. Why did you feel that was important?

2 A. That was important to determine if they had the right
3 application rate. The volume of the dome, we needed to
4 know that. I also wanted to make sure that the free
5 space area above the -- the dome had no qualifications
6 that would be important to us.

7 Q. No -- I'm sorry -- no qualifications?

8 A. That would be important to us.

9 Q. And what did you mean by that?

10 A. If it was a restricted area up there. I -- I needed to
11 get a better picture of what the inside of this dome
12 looked like in my mind.

13 Q. Did you ultimately come up with a opinion -- a vision
14 in your mind what the inside of the dome looked like?

15 A. Yes, I did.

16 Q. And what -- what -- can you describe that for me?

17 A. We had a pile of peanuts that I -- from -- from all the
18 testimony that I saw, we had discrepancies about how
19 far down from the top of the dome it was, but from 15
20 to 25 foot down from the top of the dome. And had
21 quite a bit of free space area above the peanuts just
22 from the geometry of the peanuts, the pile of peanuts.

23 Q. All right. Number 2 says, "Draw to scale picture of
24 line of site from hatch." Now what does that mean?

25 A. That was something I wanted to attempt to do. I didn't

1 ever do that. It would have been nice if I could have
2 drawn to scale a picture of the line of sight from that
3 hatch, but we never got definitive information of how
4 far down from the hatch it was so a scale picture was
5 difficult.

6 Q. In your mind right now as you visualize it, when the --
7 Mr. Turner and Mr. Lilley are looking down into that
8 hatch, what are they able to see?

9 A. Their testimony said they did see the top of the
10 peanuts and that there was a flat surface but we don't
11 know how big that flat surface was.

12 Q. Were -- were Turner and Lilley able to see into the
13 dome without the use of a flashlight?

14 A. I don't know.

15 Q. So is it possible that as they're looking down and not
16 using a flashlight all they're seeing is a black hole?

17 A. I don't know.

18 Q. That's possible, may be, may not, you just don't know?

19 A. I don't know.

20 Q. Okay. Number 3, "Review Turner & Lilley Deps - Did
21 they follow legal & appropriate practices." At the
22 time your wrote this did you -- had you read their
23 depositions?

24 A. I don't know whether I had or not at that point. I've
25 reviewed them several times.

1 Q. So maybe you're going to review that again, you don't
2 --

3 A. Possible.

4 Q. Okay. 4), "Build resume w/extensive training,
5 presentations, publications -- pubs," and then "(ext)."
6 What does that mean?

7 A. Extension.

8 Q. Extension. "On phosphines -- on phosphine safety,
9 quality, safety & sealing/sanitation." What are you
10 saying there?

11 A. Those were notes to -- to put into my CV to make sure
12 that I've got all of those things in my CV.

13 Q. Okay. And basically, you wanted to build your CV to
14 show credibility for what you're going to be testifying
15 to in this case, is that right?

16 A. Just to make sure that I have all of my -- all of my
17 information in my CV, which it is.

18 Q. All right. Presentation public -- the extension
19 publications on phosphine safety. What publications
20 are those?

21 A. Those will be fact sheets that we distributed,
22 presentations that I have made on phosphine
23 applications and safety.

24 Q. Okay. Now you've testified that you don't really --
25 you're not an expert in the chemical makeup of the

1 aluminum phosphide. When you say "safety" what are you
2 referring to then?

3 A. Application process of procedures for phosphine
4 fumigation.

5 Q. Is that the physical safety of the workers?

6 A. Yes, sir.

7 Q. Is that -- is that the fire hazards of using aluminum
8 phosphide, is that included in that?

9 A. What's in the label is what we teach our -- our
10 applicators to follow so if it's in the label and it
11 has to do with safety then we're going to -- to make
12 sure that they're aware of that.

13 Q. And do you teach anything -- so these are publications
14 that you have written or --

15 A. That I've written or have reviewed or co-authored, yes.

16 Q. Oh, okay. All right. 5), "List how Severn Peanut
17 storage practices were bad & what risks" --

18 A. Exist.

19 Q. "Exist" -- thank you -- "exist because of practices."
20 Now what did that mean?

21 A. That was a note to myself to go through and identify
22 anything I saw that was bad or if there was risks
23 involved with some of their practices and give
24 references for that.

25 Q. Okay. Now before, I think you had said your report was

1 going to say what they did right and what they did bad.
2 Now this basically you've decided what you're going to
3 do is only show what they did bad. Is -- is that
4 right?

5 A. That's not what that means, no.

6 Q. Okay. You don't say in here, list, you know, what they
7 did properly, though, do you?

8 A. Not on this particular list, no.

9 Q. Okay. All right. 6), "Refute line by line last 4
10 pieces of info (testimony)." What does that mean?

11 A. I don't remember what I was referring to there.

12 Q. All right. I couldn't figure it out either. Is it
13 possible you're talking about the four expert reports
14 that you may have received?

15 A. I have no idea what four I was referring to there.

16 Q. Well, we'll leave it at that then.

17 A. Yes.

18 Q. 7), "ID discrepancies in their testimonies." And since
19 you don't know what testimonies you're talking about,
20 we don't know what that means -- you don't know what
21 that means either, right?

22 A. That's right.

23 Q. "Calculate relative humidity in headspace for 10.5%
24 peanuts." I'm thinking 10.5 moisture content of the
25 peanuts. Is that right?

1 A. That's right.

2 Q. Now did you do that?

3 A. No, because we didn't have all the information we
4 needed.

5 Q. All right. What information would you have needed to -
6 -

7 A. I would have needed to know the temperature -- the
8 exact temperature in the headspace, the exact
9 temperature of the peanuts, and we didn't know that.

10 Q. Oh, okay. Just wasn't enough information for you to
11 determine that?

12 A. Exactly.

13 Q. All right. Page 14, you've got "goal" in the middle
14 where it says "goal: you can't admit testify." What
15 does that mean?

16 A. I don't know what that means. I don't know what that
17 means.

18 Q. Okay.

19 A. These are my notes as I'm thinking through the day and
20 sometimes they're just thoughts.

21 Q. All right. Turn to page 16, if you would. Now this
22 says "June 2 hours." Does that mean it would have been
23 June of 2013?

24 A. I'm sorry -- oh --

25 Q. Page 16, down at the bottom.

1 A. Okay. Down at the bottom.

2 Q. It says, "June 2 hours."

3 A. That was the time that I was going to record on my time
4 sheets for this account.

5 Q. All right.

6 A. On that date.

7 Q. Do you have any recollection of what year that might
8 be?

9 A. That would have been -- well, my mind is blank there.

10 Q. And if you want to look at your invoices, I mean, if
11 that would help you. I'm just --

12 A. I don't know if it would. I believe that's June of
13 this year.

14 Q. Okay. Back to the top. It says, "Look up FMP," which
15 is fumigation management plan, right?

16 A. Yes.

17 Q. "For number of applicators (certified) - used 2 - or
18 3." What does that refer to?

19 A. That note is not for this case. That was for some
20 training I was doing at that point. This is a to-do
21 list for -- for the work I'm going to do in this time
22 period there. But that was for -- for some extension
23 training I was doing for fumigators this past summer
24 and I needed to come up with several FMP examples for
25 these applicators.

1 Q. Okay. All right. The next line says, "Turner," so --
2 so that's for this case, is that right?

3 A. Yes, sir.

4 Q. "Turner said product was peaked w/small flat" -- and
5 you've -- you've mentioned that -- "heard tablets
6 rolling down side." What -- what does that mean?

7 A. In his deposition he reported that he heard tablets
8 rolling down the side of the peanuts as he applied the
9 tablets.

10 Q. All right. Is it your opinion that listening and
11 hearing if peanuts -- if tablets are rolling down the
12 side is a proper way to tell if fumigant is being
13 properly distributed?

14 A. It's a way of -- of knowing the tablet is moving. But
15 I don't know if that answers your question or not.

16 Q. No.

17 A. It's not listed on the label as -- as one of the ways
18 of knowing.

19 Q. Okay. We'll get into that later. That "saw no piled
20 peanut -- saw no piled tablets. 'Slung' tablets around
21 through 1 access port." Was it your understanding that
22 they used one access port to distribute all 49,000
23 tablets into the dome?

24 A. Yes, sir.

25 Q. You have written, "Were there more access hatches

1 available?" And then a asterisk and then another
2 question mark. What did you mean by that?

3 A. That was a question to myself if there were any more
4 available.

5 Q. And why was that important to you?

6 A. It's just the layout of this headhouse and this dome.

7 Q. Do you believe that there were more than one access
8 ports that the fumigators should have used --

9 A. No, sir.

10 Q. -- more than one?

11 A. No, sir.

12 Q. Okay. What is that -- "No" -- little bit further down
13 under "Lilley, no walkthrough on day of 8/08
14 fumigation." See that?

15 A. Yes, sir.

16 Q. Okay. And what does that mean to you?

17 A. They were not able to walk into the dome on that date
18 of fumigation.

19 Q. Page 18, if you would.

20 A. Okay.

21 Q. I've got page 106, this is Mr. Watson's deposition that
22 you're discussing. It says, "Said govt requires 'farm
23 average' <10.5 for loan." And on the left you have
24 "Not correct, by load per C. Butts." Did you call --
25 is it Mr. Butts or Dr. Butts?

1 A. Dr. Butts.

2 Q. Dr. Butts. Did you call Dr. Butts after reading that
3 line in Mr. Watson's deposition?

4 A. I emailed him.

5 Q. Okay. Did you know at the time when you read Mr.
6 Watson's deposition whether -- did you have an opinion
7 at the time that you read Mr. Watson's deposition
8 whether he was correct or not as to whether he could
9 use the farm average to determine the 10.5 figure?

10 A. No, sir.

11 Q. So you relied on Dr. Butts to give you that
12 information, correct?

13 A. Yes, sir.

14 Q. Page 19. We're still in Mr. Watson's deposition.
15 There's a -- I'm on page 188 of it.

16 A. Okay.

17 Q. "Aeration used Jan Feb/During fumigation & protect
18 it/and during loading to pull dust 'from time to time'
19 to circulate air until they got cold. Fans at night
20 Nov/Dec. Jan/Feb primarily." What is your
21 understanding of the aeration procedures performed by
22 Severn for the dome?

23 A. Ask that question again, please.

24 Q. Yeah. You've made these comments, I just want to
25 understand what your understanding is of the -- of the

1 method that was used and the times that Severn aerated
2 their dome?

3 A. Okay. This is a record of what he stated in his
4 deposition here.

5 Q. Right.

6 A. Okay. They were not able to locate any aeration
7 records so I -- my opinion is they don't have good
8 recollection of what actually -- when they actually
9 run. They were not run according to the aeration
10 manufacturers in the Safe-Grain manual, in the
11 instruction manual. They were not -- obviously were
12 not run according to those -- those instructions. They
13 were run a couple hours a day during certain periods of
14 the year. That was in one of the employees'
15 depositions. They were not run continuously while they
16 were loading the peanuts. They were run to -- to
17 manage dust but not continually during the -- the
18 loading of the peanuts into the dome.

19 Q. Okay. And were the fans -- is it your understanding
20 were the aeration fans run from December -- any time in
21 December through the end of February?

22 A. No, sir.

23 Q. All right. So just so I understand it, it's your
24 understanding that from, say, February -- I mean, some
25 -- from some December on through February they did not

1 run the aeration fans?

2 A. That was my understanding. It was very vague in their
3 information about when they actually ran the fans.

4 Q. Okay. Now Mr. Watson says -- further down, it says,
5 "Always dry out in storage. Air always dries them
6 out." What did you -- why did you write that down?

7 A. That was something he stated in his deposition.

8 Q. All right. Do you believe that aeration dries --
9 reduces the moisture content of peanuts?

10 A. Not always.

11 Q. Okay. It can, though, correct?

12 A. If the EMC and ERH situation -- if the qualities of the
13 moisture content and the relative humidity are correct,
14 yes, it can, or it can re-wet them.

15 Q. On page 20, line 219, "Peanuts are not 'as easily
16 damaged by heat' as grain. Not as susceptible to going
17 through a 'heat' as grain." Would you agree with that
18 statement?

19 A. I don't know.

20 Q. Okay. Page 22. I'm looking at line 304. "15-20' wide
21 area at top that's flat - very flat -." Do you recall
22 what that's a reference to?

23 A. That is a statement he made in his deposition.

24 Q. Do you recall if he's referring to the top of the dome
25 -- I mean, the top of the pile of peanuts?

1 A. That's what I assume he's referring to.

2 Q. All right. Page 26. We're still on Watson deposition.

3 A. Deposition 3.

4 Q. Yeah. Page 104, "Watson was aware of SafeGrains
5 aeration instructions but disregarded it." What do you
6 mean by that?

7 A. He was aware that there were aeration instruction that
8 came from Safe-Grain but he stated he didn't -- wasn't
9 aware of what was in that -- in those instructions.

10 Q. Now is this aeration or is this -- is this written
11 instructions on how to use the aeration system?

12 A. Yes, sir.

13 Q. All right. So you believe Mr. Watson received written
14 instructions on how to use aeration system?

15 A. Yes, sir.

16 Q. "Thinks it would completely dehydrate pnuts." Do you
17 know that means?

18 A. One of his statements -- or several of his statements
19 that's in his deposition indicated that he felt that
20 aerating the peanuts would completely dry out the
21 peanuts.

22 Q. All right. Was he -- do you recall whether Mr. Watson
23 was talking about continuously running aeration fans?

24 A. I don't --

25 Q. You don't --

1 A. -- know what he was referring to.

2 Q. Okay. Page 30, if you would. You've got "FMP for
3 Dome." Now at the top it says, "Wade depo," but does
4 the "FMP for Dome," is that referring to the deposition
5 of Lee Wade or do you know or is that something
6 separate?

7 A. That's something separate.

8 Q. Okay. "'Typically' takes 4 IFC cert applicators for
9 specific sealing requirements, may vary." Did I read
10 that right?

11 A. Yes.

12 Q. Okay. What did you mean by that?

13 A. It typically would take four IFC certified applicators
14 for the -- the sealing of the dome that was written in
15 their FMP plans.

16 Q. Okay. Do you know if they had four certified
17 applicators when they did the August 4th, 2009
18 fumigation?

19 A. On-site or in the company?

20 Q. On-site.

21 A. No, they did not.

22 Q. So the plan called it the -- if the fumigation plan
23 calls for four and they don't have four they would not
24 be following the terms of their own fumigation
25 management plan, is that right?

1 A. The fumigation management plan would -- refers to four
2 certified applicators for the sealing, not the
3 application of the product.

4 Q. All right. So if -- do you know how many certified
5 applicators IFC had when they sealed the dome?

6 A. I don't know.

7 Q. Okay. Wouldn't they have sealed the dome right after
8 applying the fumigant?

9 A. They would have sealed it before. The sealing that was
10 done for the shoots and all was done before they
11 applied.

12 Q. All right. Did you read the testimony of Mr. Turner
13 and Mr. Lilley where they talked about coming and
14 sealing the dome?

15 A. Yes, I did.

16 Q. All right. And were there four certified applicators
17 present when they sealed the dome?

18 A. When they sealed it, I don't know. When they applied
19 the applicant there were two.

20 Q. Okay. Now this one doesn't have a number so --

21 A. Okay. It's at the top of it.

22 Q. Oh, I'm sorry. If you would look, it says, "How does
23 Brown know it wasn't distributed well?" We're about
24 five or six pages from the end.

25 A. Uh-huh.

1 Q. Five from the end.

2 A. Okay.

3 Q. All right. And -- and you have an "8" in the middle on
4 the left side.

5 A. Yes.

6 Q. It says, "Entering the dome during application was
7 impossible and exceeds all necessary danger risk
8 imaginable!!!" What did you mean by that?

9 A. "Exceeds any" -- not all --

10 Q. I'm sorry.

11 A. -- "necessary danger risk imaginable."

12 Q. Thank you.

13 A. Those are my notes to myself that entering that dome
14 during the application would have been very dangerous,
15 just to summarize what I'm saying there. It would have
16 been very dangerous.

17 Q. Okay. Would it have been possible to enter the dome if
18 you took the necessary precautions?

19 A. With rope ladders you could have entered the dome;
20 however, it still would have been very dangerous.

21 Q. The next line says, "The soldier in the middle would
22 have certainly caused an accident." What did you mean
23 by that?

24 A. There was a soldier in the middle. We think there was
25 a soldier in the middle of this dome because there had

1 been in the years past and the -- the peak in the
2 middle of the dome -- or the core in the middle of the
3 dome certainly indicated the possibility was there,
4 there was a soldier this -- this season also.

5 Soldiers are notorious for falling over and
6 hurting people. In fact, Mr. Watson had indicated in
7 one of the earlier seasons that he had a soldier
8 knocked down because he was afraid that it would fall
9 on someone.

10 Q. Is it your understanding that a soldier protrudes from
11 the surface of the pile of the commodity?

12 A. Sometimes, but not always.

13 Q. Okay. Is it your understanding that the soldier
14 referred to by Mr. Watson was actually extending beyond
15 the surface of the pile of peanuts in that previous
16 crop year?

17 A. I -- that's what I construed from -- he didn't ever
18 really say that, but that's I construed was the -- what
19 he said. That was my picture in my mind as I read
20 that.

21 Q. Do you understand on that first fumigation they had
22 emptied out part of the dome and part of the peanuts
23 from the dome and that's when they saw the soldier?

24 A. Yes, sir.

25 Q. Okay. And the -- so you don't believe that that

1 soldier was underneath the pile of peanuts or within
2 the pile of peanuts and it was only exposed after you
3 removed peanuts from the side?

4 A. Soldiers can happen either way.

5 Q. I'm asking you --

6 A. So I don't know. I don't know.

7 Q. You don't know. But your comment that it would have
8 been very dangerous or that the soldier was in the
9 middle would have certainly caused an accident would be
10 based on the soldier extending up beyond the surface of
11 the pile of peanuts?

12 A. Yes, sir.

13 Q. Okay. All right. And further down on that same page,
14 we have "phosphine gas 'will' combust -- no reference.
15 All refs say 'may' or 'can,' never 'will.'" Is that
16 right?

17 A. Yes, sir. That's what it says.

18 Q. So your understanding, though, is the references that
19 talk about phosphine gas says it may combust or can
20 combust?

21 A. Yes.

22 Q. Okay. Okay.

23 MR. EPSTEIN: We've gone a little over an
24 hour, you want to just go ahead and take
25 a break?

1 MR. WIDIS: Sure. That would be fine.

2 THE WITNESS: A break would be good.

3 MR. WIDIS: Good.

4 (WHEREUPON, the deposition was recessed at
5 10:00 a.m. and reconvened at 10:06 a.m.)

6 BY MR. WIDIS:

7 Q. Now, Dr. Jones, I believe in your -- earlier, you said
8 that it was your understanding that Severn Peanut did
9 not run aeration fans from, say, late December through
10 February, is that right?

11 A. It's my understanding they don't have records of when
12 they ran those fans.

13 Q. Okay.

14 A. So I'm not sure when they ran those fans in that period
15 of time.

16 Q. All right. Do you -- is it your understanding that
17 they ran the fans at any time from December through
18 February?

19 A. I'd have to go back and look at the notes. If they ran
20 them it was only two hours a day.

21 Q. All right. Would the fact of whether they ran the
22 aeration fans or not be important data that you would
23 use in -- in forming an opinion as to the storage
24 practices?

25 A. It would be my opinion that two hours a day is not long

1 enough if that's, in fact, how they ran the fans.

2 Q. All right. Let's go to your report, page 1, or page 2
3 actually. And I'm just going to go down the -- under
4 background. The first sentence says that the "IFC
5 certified fumigators Brian Lilley and Randy Turner
6 fumigated the dome" -- I'm just going to paraphrase --
7 upon the -- on August 4th, 2009 with 49,000 tablets of
8 Fumitoxin upon request of RP Watson of Severn Peanut
9 Company. Just want to be clear, when do you think the
10 request was made to fumigate the dome?

11 A. I don't know what date.

12 Q. You weren't implying that the request was made on
13 August 4th, though, were you?

14 A. That was not my implication here.

15 Q. Down toward the end of that first paragraph, "IFC
16 successfully fumigated," see that?

17 A. Yes.

18 Q. Yeah, if "IFC successfully fumigated the dome using the
19 same method in the past." Now what do you mean by
20 "successfully fumigated?"

21 A. They fumigated the dome and killed insects. That's the
22 purpose of fumigation.

23 Q. And do you know they killed insects?

24 A. They reported that they did.

25 Q. Who did? Who reported that?

1 A. Taylor (sic) and Lilley said that it was a successful
2 fumigation so that's what's implied by "successful
3 fumigation."

4 Q. And is the sole use of your word "successful
5 fumigation" meaning that they killed insects?

6 A. Yes, sir.

7 Q. And were there any reported problems with any of those
8 fumigations?

9 A. Not that I read.

10 Q. And would that also be successful if there's no
11 reported problems?

12 A. Yes, sir.

13 Q. But as you sit here, you don't actually know what
14 happened inside the dome on those other occasions, do
15 you?

16 A. No, sir.

17 Q. I mean, there could have been some ignition that didn't
18 actually cause a fire, correct?

19 A. I don't know that one way or the other.

20 Q. Okay. And on the bottom of page 2, you'd actually
21 discussed the aeration in a little more detail here so
22 maybe this would help refresh. You said, "the aeration
23 system reported by RP Watson of SPC in his deposition
24 to run occasionally during loading of the dome to
25 control dust, two hours per day during the cold months

1 (December '08 to February '09)."

2 A. Okay. So there's our answer for that time period. Two
3 hours per day.

4 Q. And that's your understanding of when the aeration --

5 A. It's my understanding. That's what Mr. Watson put in
6 his deposition.

7 Q. Are you basing your opinion as to the storage practices
8 on anything other than the information that's been
9 provided to you?

10 A. No, sir.

11 Q. All right. Do you have any information other than what
12 you've just cited as to the manner in which the
13 aeration fans were run?

14 A. No, sir.

15 Q. Page 3, we're just going to move through your report.
16 It says, under Best management practices, "agricultural
17 products must be managed using industry best
18 practices." Now when you say "must," you're not saying
19 that the industry best practices are a mandatory
20 standard, are you?

21 A. Could you define "mandatory" in your -- in your mind?
22 What's mandatory?

23 Q. Well, let me put it this way. What do you mean by
24 "must" as opposed to "should"? You use the word
25 "must."

1 A. I use the word "must" because if you don't follow
2 certain practices at the chances for -- for that
3 commodity to go out of quality are very high.

4 Q. But there's no -- there's no regulations requiring them
5 to follow exactly what's said in the best management
6 practices, is there?

7 A. There's no lawful regulations, that's true.

8 Q. And in the introduction to the American Peanut Council
9 Good Agricultural Practices, there's a paragraph. I
10 just want to read this to you and tell me if you agree
11 with that. It says, "As producers adopt and implement
12 good agricultural practices, it's important to remember
13 there are no uniform approaches to good agricultural
14 practices that address each individual producer's
15 specific management program. These guidelines are
16 merely recommendations based on the most common peanut
17 production practices. Within each peanut production
18 region and even farm to farm, there may be unique
19 circumstances or management practices that influence
20 the associated food safety risks."

21 Do you agree with that?

22 A. I agree that that's what's in their publication, yes.

23 Q. Do you agree with the content of it?

24 A. I agree that there are a lot of variables that go into
25 decisions of management.

1 Q. All right. At the bottom of that second paragraph on
2 page 3, you've got the line -- let me read the -- "This
3 biological 'self-heating' can cause spontaneous
4 ignition and fire." And you've referred to Mills, see
5 that?

6 A. Yes, sir.

7 Q. All right. Do you consider yourself an expert in fire
8 science?

9 A. No, sir, that statement was citing Mr. Mills'
10 publication.

11 Q. Can you describe for me your understanding of how
12 biological heating would progress to actual ignition?

13 A. Other than what he reports in his -- in his writings
14 there, that's my only understanding.

15 Q. Now, Mr. Mills states that "mold-induced heating of
16 stored grains, pellets, feeds, and hay attains
17 temperatures of 55° C and remains at this level for
18 weeks." Do you have any reason to refute that
19 statement?

20 A. No, sir.

21 Q. Would you agree that Mr. Mills basically says that
22 heating -- spontaneous heating leading to combustion of
23 commodities is rare?

24 A. I have no data one way or the other.

25 Q. All right. Mr. Mills states on page 50 of his

1 document, "Fires and explosions are not usually caused
2 by self-heating; therefore other causes, for example,
3 arson, should first be examined." Do you have any
4 reason to refute that or think that's wrong?

5 A. I have no data one way or the other.

6 Q. Okay. Are you familiar with the plateau that Mr. Mills
7 was talking about when it reaches 55 degrees C?

8 A. I'm not an expert in that area.

9 Q. Would that mean you're not an expert in the area of
10 spontaneous combustion of commodities?

11 A. That's true.

12 Q. Of agricultural commodities, I mean?

13 A. Yes.

14 Q. That's true?

15 A. That's true.

16 Q. Okay. Bottom of page 3, and I know this is your area
17 so let me --

18 A. Okay. I'll be glad to answer things that are in my
19 area.

20 Q. Page 3, we've got the bullet point. "Aeration fans
21 should be actuated continually during filling (except
22 when insecticides are in use). This will ensure
23 continual air movement and heat exchange, thus keeping
24 the temperatures of the over space air in equilibrium
25 with ambient."

1 Now you've taken that language from a document.

2 Do you know what document that's pulled from?

3 A. From the American Peanut Council's publication.

4 Q. Okay. Have you read Dr. O'Keefe's deposition
5 transcript?

6 A. I read it, yes.

7 Q. Okay. And I was pointing out some areas and maybe just
8 want to get your comment on that. Does the document
9 say aeration fans or is that referring to ventilation?

10 A. Okay. We're getting into semantics here.

11 Q. Yes, we are.

12 A. The dome only had one set of fans and that was aeration
13 fans so for ventilation or aeration either one, that
14 was their only option was to run the aeration fans.

15 Q. I understand that. I'm referring to this quote that
16 you've put in your report. The quote actually doesn't
17 say aeration fans, does it? Doesn't it just say --

18 A. I don't remember exactly what the document says.

19 Q. This is Exhibit 238.

20 A. May I have a copy?

21 Q. Certainly, of course.

22 A. Thank you.

23 (WHEREUPON, Exhibit Number 238 previously
24 marked for identification was passed to
25 the witness for review)

1 BY MR. WIDIS:

2 Q. Is the language you're referring to on the first bullet
3 on page 3 of 5?

4 A. Yes, sir.

5 Q. Okay. And isn't this document talking about warehouses
6 with ventilation not aeration?

7 A. Again, we're talking about air movement here. It's
8 semantics whether ventilation is aeration. The intent
9 is to move air. It says that will ensure continual air
10 movement and heat exchange. An aeration system does
11 that.

12 Q. Just so I understand, ventilation system, there's a
13 distinction between a ventilation system and an
14 aeration system, isn't there?

15 A. Not necessarily, no, an aeration system can be a
16 ventilation system. Exhaust fans are different from
17 aeration systems, but that's not been referred to here.

18 Q. Let me show you 237.

19 A. Okay.

20 (WHEREUPON, Exhibit Number 237 previously
21 marked for identification was passed to
22 the witness for review)

23 BY MR. WIDIS:

24 Q. Are you familiar with this document, The American
25 Peanut Sheller's Association Handling and Storage of

1 Farmer Stock Peanuts?

2 A. Yes, sir.

3 Q. Now, if you'd turn to page 13.

4 A. Okay.

5 Q. Have you reviewed this document recently?

6 A. Yes.

7 Q. Doesn't page 13 make a distinction between ventilation
8 systems and aeration systems?

9 A. It states what they consider ventilation and aeration
10 systems, yes.

11 Q. Okay. It says, "The ventilation is part of the
12 warehouse equipment and structure designed to remove
13 the excess heat and moisture from the peanuts by
14 pulling outside air through the headspace, the air
15 above the peanuts and below the warehouse roof, and
16 exhausting the moisture heat laden air to the outside."
17 So as I understand it, correct me if I'm wrong, a
18 ventilation system according to this document is air
19 that's pulled from the outside across the top of the
20 peanut pile and out of the structure.

21 A. It doesn't necessarily say that it's across the top of
22 the peanut pile.

23 Q. Okay. I thought it says, remove the heat and moisture
24 from the peanuts by pulling through air through the
25 headspace the air above the peanuts and below the roof

1 line and exhausting the moisture and heat laden air to
2 the outside.

3 A. That could be exhausted down at the bottom of the
4 storage. It doesn't say it doesn't go down through the
5 peanuts.

6 Q. Okay. Then look, please, at the next paragraph. "An
7 aeration system is a mechanical system designed to
8 force air through the peanut mass absorbing moisture
9 and heat as it goes, then exhausting to the outside."
10 Isn't that making a distinction that aeration is
11 pulling the air through the mass, through the peanuts
12 and out while the ventilation is taking the air from
13 the headspace out?

14 A. Okay. We're getting into semantics here now. Okay.
15 An aeration system can also be a ventilation system
16 because it -- by this definition, it pulls air from the
17 headspace. It would pull it down through the peanuts,
18 but it doesn't say that's not part of ventilation here.
19 So it's exhausting air from the headspace through the
20 peanuts to the outside and that fits the definition of
21 a ventilation system. So an aeration system,
22 particularly in the case of the dome, can be a
23 ventilation system.

24 Q. All right. And that's not my question. There's a
25 distinction between aeration and ventilation on page

1 13, correct?

2 A. They describe both of those here, yes. There's a
3 distinction. It does not say -- it does not say that a
4 ventilation system cannot also be an aeration system.

5 Q. Okay. And the language that you've quoted which is
6 "fans should be actuated continually during filling.
7 This will ensure continual air movement and heat
8 exchange keeping the temperatures of the over space air
9 in equilibrium." That's talking about the air above
10 the pile of peanuts, isn't it?

11 A. Yes.

12 Q. All right. Which would mean ventilation?

13 A. Ventilation.

14 Q. All right. So isn't this actual -- "fans should be
15 actuated continually during filling" referring to a
16 system whereby you're pulling the air across the top of
17 the pile during filling?

18 A. No.

19 Q. Not through?

20 A. That's not what the definition according to this says.

21 Q. All right. Well --

22 A. It doesn't say across the top. It says, through the
23 headspace and exhaust it to the air. It doesn't say
24 where you're going to exhaust it to.

25 Q. Okay. Keep those handy.

1 A. Okay.

2 Q. Now, on page 4, I'm looking -- you've got "For storage
3 in monolithic Domes," under ventilation -- under your
4 section of "For storage in monolithic Domes.

5 A. I see it there.

6 Q. Okay. That language that you've quoted 4.1, what
7 document does that come from?

8 A. The Handling and Storage of Farmer Stock Peanuts
9 published by the APSA.

10 Q. Okay. That's this Exhibit 237 that we've looked at,
11 right?

12 A. Yes, sir.

13 Q. 4.2, I'm sorry. This section, this next paragraph,
14 "From a practical standpoint, the ventilation fans
15 should be run continuously while peanuts are in the
16 warehouse." Now, doesn't that one refer to ventilation
17 out of this document as opposed to aeration? I mean,
18 that's from page 15 of the Handling and Storage
19 handbook, isn't it?

20 A. Yes, sir.

21 Q. All right. And page 13 starts Ventilation and
22 Aeration, page 13, gives you a distinction between
23 ventilation and aeration. Page 14 talks about
24 mechanical ventilation and then your paragraph about
25 from a practical standpoint talks about ventilation.

1 It doesn't really -- then page 20 starts about aeration
2 systems. So aren't -- isn't the paragraph that you've
3 got here from a practical standpoint, actually talking
4 about a mechanical ventilation system as opposed to the
5 ventilation system that the Severn dome has?

6 A. The Severn dome has an aeration system that can be used
7 as a ventilation system and that's --

8 Q. I fully understand that. I mean, that it's a movement
9 of air --

10 A. It's a movement of air.

11 Q. -- and I've got that. I'm talking about you've relied
12 on a paragraph that the documents have under the
13 section for mechanical ventilation as opposed to
14 aeration, you would agree with that?

15 A. Yes, sir.

16 Q. Now, ventilation fans, this one says, "the ventilation
17 fans should run continuously while peanuts are in the
18 warehouse, except when fogging or fumigating with
19 chemicals labeled for use in farmer stock warehouses."
20 Mr. Watson didn't agree with the idea of running a fan
21 continuously, did he?

22 A. No, he did not.

23 Q. No, he basically said he thought it would cool his
24 peanuts down too much, right, or perhaps, dry them out
25 too much?

1 A. I believe that what he said in his deposition.

2 Q. Do you believe Mr. Watson has practical experience
3 running a peanut storage facility?

4 A. I don't know what his experience running a storage
5 facility is.

6 Q. Okay. Do you understand Mr. Watson has operated a
7 peanut storage warehouse for years?

8 A. He has been part of that company for years. I don't
9 know what his daily activities are with running that
10 warehouse.

11 Q. Okay. Have you ever operated a warehouse storing
12 farmer stock peanuts?

13 A. No, sir.

14 Q. Okay. And so the material you're getting is actually
15 from the literature that you're pulling together, is
16 that right?

17 A. Yes, sir.

18 Q. Page 5, again, under Fan Operation, it says, "Excessive
19 fan operation can dry peanuts to below the desired
20 minimum of 7% causing excessive shrink(ing)." What
21 does that --

22 MR. EPSTEIN: "Excessive shrink."

23 MR. WIDIS: Thank you. "Excessive shrink."

24 BY MR. WIDIS:

25 Q. What does that mean to you?

1 A. It means to me that if they're not running their fans
2 according to the management practices with ERH and EMC
3 that it is possible to dry peanuts below the seven
4 percent. Sometimes when you run fans on a very dry
5 commodity, you get what we call "shrink" which is
6 shrink would be the loss of material through the
7 aeration system. That's what that means.

8 Q. All right. So you would agree you can dry peanuts out
9 too much if you run fans?

10 A. If they're not run according to the EMC and ERH
11 management practices.

12 Q. Now, did you and I think we spoke about this. You
13 recall Mr. Watson saying that at an earlier time, he
14 thought he ran them too much and turned the skins red
15 instead of pink?

16 A. That's what was in one of his depositions, yes.

17 Q. And you would agree that Mr. Watson has more practical
18 experience than you do in running a warehouse storing
19 farmer stock peanuts?

20 A. I don't know what his experience is in the warehouse.

21 Q. You have none, though, right?

22 A. I have none.

23 Q. Okay. Page 6, You've got Mills, you've quoted again
24 Mr. Mills. Maximum moisture content is 9 percent for
25 unshelled peanuts up to -- temperatures up to 27C,

1 correct?

2 A. That's what he states, yes.

3 Q. Okay. Do you have any reason to believe that's true or
4 false?

5 A. That's what he puts in his -- that's what he reports,
6 his research in that publication.

7 Q. Okay. You've included it in your report. Do you
8 believe it's valid then?

9 A. I would not have put it my report if he hadn't stated
10 it.

11 Q. But you've done no independent research to verify that,
12 you're just relying on Mr. Mills?

13 A. That's correct.

14 Q. Third line down, "Insect in dry bulks containing 15%MC
15 or less can result in heating up to 108F." I just want
16 to make sure I understand. When you're saying that,
17 are you saying that the commodities can actually get up
18 to 108 degrees Fahrenheit solely from the infestation
19 of insects?

20 A. Yes. Yes, sir.

21 Q. How high -- maybe this is the same question -- how high
22 can temperatures rise in a commodity purely from insect
23 infestation?

24 A. I don't know. I've not done that testing.

25 Q. Okay. And at the bottom of this page 6 or the next to

1 the last paragraph, one of your bullet points.

2 A. Okay.

3 Q. Okay. I'm going to say the three sentences up.

4 "Research shows that temperatures increase due to
5 insect activity or high moisture levels. Certain
6 insects are attracted by high moisture in the storage
7 bulk, thus compounding the heating issue in that area.
8 This situation develops a 'hot spot' that must be
9 disrupted and the insect activity must be eradicated."

10 I read that right, right?

11 A. Yes, you did.

12 Q. Okay. When you say so they -- if you had temperatures
13 increasing up to say, 108 which you said here, that --
14 and that created a hot spot, that could actually be
15 just insect infestation, is that right?

16 A. That's one of the possibilities.

17 Q. Okay. And then one way to treat insect infestation is
18 to fumigate, correct?

19 A. Correct.

20 Q. Page 7, you talk about insect monitoring, the next to
21 last paragraph.

22 A. Yes, sir.

23 Q. Your second full sentence. "Indian meal moth larvae
24 spin a web as they feed forming a web over the top
25 surface of the product." Have you actually seen this

1 web?

2 A. Yes, sir.

3 Q. Okay. Describe for me what that looks like.

4 A. It looks like a layer of Halloween webbing, you know,
5 the gauze-type webbing we use for Halloween
6 decorations. It looks like that on the top of the
7 surface of the product.

8 Q. And is it a small pocket? Can it be big?

9 A. It can be any size.

10 Q. What's the largest you've personally seen?

11 A. The entire top of a grain bin covering the surface.

12 Q. Totally covered with --

13 A. Totally covered, yes.

14 Q. Now, then it says, "Moisture can develop under the
15 areas of webbing and aeration is limited in controlling
16 this moisture due to the lack of the aeration system's
17 ability to move air through the webbing." What form
18 does this moisture take that you're talking about
19 that's under the web? In other words, is it -- is it
20 just dampness or are there water droplets, are there,
21 you know, sticking to the web? I'm just trying to get
22 an understanding of when you say "moisture can
23 develop." What -- is it moisture, you know, liquid
24 water right under the webbing?

25 A. I've seen two situations that -- where we could

1 identify distinct water activity there. I've read
2 about many, but those two situations, one of them where
3 the web itself was actually wet underneath that. I
4 mean, you could scoop it away and feel the water
5 underneath it. The other situation that I observed
6 with my own hands and eyes, there was a layer of
7 material right under that web that was wet, very wet
8 and moldy.

9 Q. Now, Lilley and Turner testified, I think, that when
10 they opened the dome on August 4th, Indian meal moths
11 flew out or insects flew out.

12 A. They testified Indian meal moths flew out.

13 Q. Okay. Would it be possible for that web to have been
14 down on the peanuts?

15 A. It's possible.

16 Q. All right. Do you know if they looked for the web?

17 A. I didn't see that reported in their deposition.

18 Q. Is the presence of that web something that certified
19 applicators of aluminum phosphide should be looking for
20 before they put aluminum phosphide on the product?

21 A. There not instructed to do that, no.

22 Q. Okay. Do you think it would be prudent to see if there
23 is a web that may contain moisture on the top of a pile
24 of peanuts before you put 49,000 tablets down onto it?

25 A. I don't think it would be something I would consider,

1 no.

2 Q. Now, as far as you know, the certified applicators are
3 supposed to check the condition of the commodity before
4 they fumigate, correct?

5 A. They check the -- not the condition of the commodity.
6 They'll check the safety conditions of the structure to
7 see if there is any leakage of water, things like that.
8 Something that would interfere with their fumigation.

9 Q. Okay. So it's your understanding in testifying about
10 fumigation, that the certified applicators of the
11 aluminum phosphide do not need to check the condition
12 of the commodity to see if it can be safely fumigated?

13 A. What do you mean by "condition"?

14 Q. Temperature, we'll say temperature.

15 A. They record the temperature of the commodity.

16 Q. All right. Should they -- should the certified
17 applicators try and see if there is any wet spots on
18 it?

19 A. Not necessarily, no, that's not necessarily something
20 they would always do.

21 Q. Do you think that would be a prudent thing to do before
22 you put aluminum phosphide down? Would it be prudent
23 to check to see if there is any wet spots on the
24 commodity?

25 A. They need to look for standing water.

1 Q. Standing water?

2 A. Standing water, free water.

3 Q. And how would there be standing water on the surface of
4 a commodity?

5 A. If there was some kind of -- something that was not
6 allowing the water to sink in or to evacuate from
7 there, yeah, a press of some kind.

8 Q. Other than looking for -- would that be a pool of water
9 you're talking about?

10 A. Standing water.

11 Q. Other than looking for standing water, do you think the
12 applicators need to check to see if there is any
13 wetness on the commodity before they apply the --

14 A. Only if --

15 Q. -- aluminum phosphide?

16 A. Sorry. Only if it indicates standing and free water.

17 Q. Okay. And how would they -- how would the fumigators
18 check the temperature of the commodity?

19 A. Temperature cables are a really good way to check the
20 temperature of the commodity.

21 Q. All right. Other than temperature cables, what would
22 a --

23 A. That's the most accurate way.

24 Q. All right. So is there any way for the applicators to
25 actually physically themselves check what the

1 temperature of the commodity is?

2 A. They can use thermometers, grain probes to check that,
3 yes.

4 Q. Are those readily -- are grain probes -- are laser
5 pointed thermometers, are those available?

6 A. Those are available, yes.

7 Q. And those are items that an applicator could use to
8 check the temperature of the commodity?

9 A. They could, yes.

10 Q. Now, what if you can't get into the area to touch the
11 commodity. How do you think a applicator should
12 determine the temperature?

13 A. They need to -- need to depend on the temperature
14 cables in the commodity.

15 Q. Let's go to page 8.

16 A. Okay.

17 Q. You've cited the federal regulations under the
18 government loan program which says, "Domestic and
19 imported peanuts shall be dried 18 percent or less
20 prior to inspection and at 10.49 percent prior to
21 storing or milling," correct?

22 A. Correct.

23 Q. And we won't worry about the seeds right now just --

24 A. Okay.

25 Q. And then further down, you say that as between the

1 buyer and the seller, they can grade and market a
2 peanut up to 18 percent and then it's up to the buyer
3 to dry it down to 10.49 for safe storage, right?

4 A. Right.

5 Q. And would you agree that if they reduce it to 10.49
6 that would -- that was the requirement that they need
7 to do in order to bring it down for safe storage?

8 A. No, they need to continue to dry that down to seven to
9 eight percent for safe storage.

10 Q. Okay. Now, seven percent is too low, isn't it? Didn't
11 you say that?

12 A. Between seven and eight percent.

13 Q. All right. Now, you said Dr. Butts, and let's just go
14 over this. And, I believe, you're aware from the
15 previous -- from looking at your notes that Severn
16 considered the farm average to be what you used to
17 determine the 10.49, correct?

18 A. Yes, sir.

19 Q. And you went to Dr. Butts for his opinion as to what
20 would constitute the quantity of peanuts that the regs
21 is referring to, correct?

22 A. Correct.

23 Q. And I take it that's because you looked and you didn't
24 see any regulation or definition or anything that would
25 let you know what quantity of peanuts they were

1 referring to that needs to be brought down to 10.49 for
2 storing, is that right?

3 A. I wanted to know what the regulations said or what
4 their interpretation was on whether they needed to
5 calculate that on the load or on the whole farm.

6 Q. All right. And you looked for a written definition of
7 that that would give you that -- a rate, a ruling, some
8 type of ruling that would tell you, but you couldn't
9 find that, I take it?

10 A. I couldn't find it.

11 Q. So you called Dr. Butts to get his opinion?

12 A. I emailed him.

13 Q. You're right. You emailed Dr. Butts to get his opinion
14 and that's what Dr. Butts told you his opinion was,
15 right?

16 A. Yes, sir.

17 Q. Now, just so we have it clear, is Dr. Butts -- Dr.
18 Butts is in the research and -- he's in the research
19 field. He's not in the business of buying and selling
20 peanuts, is he?

21 A. He's in the research and extension field through the
22 USDA and they also are involved in setting the
23 standards for marketing of peanuts.

24 Q. Okay. And this is -- the standards are -- that is
25 written in the regulations, right?

1 A. That's where they end up, yes.

2 Q. Okay. But Dr. Butts is not on the buying and selling
3 of storage peanuts end, is he?

4 A. He does training in that area, but no, he does not buy
5 and sell peanuts.

6 Q. Okay. Do you consider peanuts with a moisture content
7 of greater than seven percent -- strike that.

8 Do you consider peanuts with a moisture content of
9 seven percent to be a high moisture peanut?

10 A. No, sir.

11 Q. So in other words, would you consider a peanut with a
12 moisture content of 8.4 percent to be a problem with
13 regard to safe storage?

14 A. Under certain temperatures, yes, if the temperature is
15 high or -- yeah, under certain temperatures it would
16 not store well, yes, that's true.

17 Q. Okay. Would you consider a peanut with eight percent
18 moisture content to be unsafe for storage?

19 A. At some temperatures, yes.

20 Q. So basically, at any temperature, some peanuts are not
21 going to be safe for storage, is that basically what
22 you're telling me?

23 A. Not necessarily, you have to look at when mold will
24 grow. I'm not a mold expert, but I've read people who
25 are mold experts and their documents that even at eight

1 percent mold can grow if the temperature is high
2 enough.

3 Q. Okay. But you don't consider seven percent to be a
4 high moisture peanut?

5 A. No, I do not.

6 Q. Okay. Would you consider 7.5 percent moisture content
7 to be excess moisture?

8 A. At some temperatures, yes.

9 Q. Page 9, middle of that paragraph, you've got, "IFC
10 fumigators report that Indian Meal Moths," see that?

11 A. Yes.

12 Q. -- "flew out of the Dome when they opened the access
13 hatch to apply the fumigant tablets." And I think
14 you've already answered this, but would you have
15 thought that the web you referred to earlier would have
16 been on some portion of the peanuts if they saw those
17 Indian Meal Moths flying out on August 4th, 2009?

18 A. Not necessarily, no.

19 Q. Could be, could not, you just would have no opinion on
20 that?

21 A. I would have no opinion on that. It can or it cannot
22 happen.

23 Q. Okay. It says, "The tablets were distributed to the
24 peanuts below through the hatch at the top of the
25 Dome." All right. When you say, "through the hatch at

1 the top of the Dome," are you aware there were more
2 than one hatch at the top of the dome?

3 A. Yes.

4 Q. Okay. But they used one, correct?

5 A. Correct.

6 Q. "IFC fumigators, Brian Lilley and Randy Turner,
7 reported seeing the peak of the peanuts about 20 ft
8 below and heard the tablets as they went down the
9 slopes of the peanuts." Now, they looked down, they
10 saw the pile, but while they're distributing they
11 weren't looking down, is that correct?

12 A. I don't know that they weren't looking down as they
13 were distributing.

14 Q. Okay. Well, take for -- let's assume that's true
15 because their testimony says that.

16 A. Okay.

17 Q. But you can -- for my question, you can assume that
18 they weren't looking in while they were fumigating.

19 A. That they were?

20 Q. They were not looking in.

21 A. They were not?

22 Q. They were not while they were distributing.

23 A. Okay.

24 Q. It's correct, isn't it that they didn't observe the
25 tablets rolling, but they heard the tablets rolling?

1 A. Correct.

2 Q. Okay. Now, they put in 49,000 tablets, right?

3 A. Correct.

4 Q. Now, what does that mean to you, that they heard the
5 tablets rolling?

6 A. That means they heard some tablets rolling.

7 Q. What information does that relate to you?

8 A. That some of the tablets rolled.

9 Q. Okay. Some rolled -- do you know if all the tablets
10 rolled?

11 A. I have no idea.

12 Q. Do you think you can tell that all the tablets rolled
13 by listening to the sound of tablets rolling?

14 A. I have no idea.

15 Q. Well, as you sit here today, do you think listening to
16 whether tablets are rolling is a proper method to
17 determine if tablets are piling or stacking?

18 A. I think that it's one of the ways of knowing that
19 they're rolling. That's all I know.

20 Q. When you teach your fumigation classes, do you instruct
21 them to listen to hear -- to listen and see if the
22 tablets are rolling and that would be a means for them
23 to determine if the tablets are stacking or piling?

24 A. I do not teach that.

25 Q. Not to belabor a point, but do you know the difference

1 that a -- the sound the tablet would make when it lands
2 against a peanut as it lands against another fumigant
3 tablet?

4 A. No, sir.

5 Q. Okay. Do you think -- do you know the difference in
6 the sound the tablet would make when it lands flat on a
7 surface against as opposed to rolling? Can you tell
8 the difference?

9 A. No, sir.

10 Q. Okay. You reported, "They slung the tablets from the
11 flasks by rotating their wrists as they emptied the
12 tablets." Now, where did you get the information that
13 they're rotating their wrists?

14 A. From the depositions.

15 Q. Do you know who said that?

16 A. Either Mr. Lilley or Mr. Turner. I don't remember
17 which one.

18 Q. Do you know how far you could fling a tablet by
19 rotating your wrist?

20 A. No, sir.

21 Q. Do you know if Mr. Turner or Mr. Lilley had any idea
22 how far they could fling a tablet?

23 A. It was not reported in their deposition.

24 Q. You said, "The application rate was the same as was
25 used in December '08 treatment but less than in prior

1 years." Is that your understanding?

2 A. That was my understanding.

3 Q. Okay. Actually, just for accuracy's sake, didn't they
4 use 59,000 the first time and 39,000 after that then up
5 to 49 and then 49?

6 A. Correct.

7 Q. Okay. So actually it wasn't less than they did in --

8 A. In previous years, it was less than the 59,000.

9 Q. Right. But not less than the 39?

10 A. No, not less than 39,000.

11 Q. Okay. Now we've gotten to your part and their failure
12 to follow best storage practices.

13 A. What page are you on?

14 Q. I'm on page 9, still page 9.

15 A. Okay. All right. I'm with you.

16 Q. All right. Let me go back. One other statement that
17 --

18 MR. EPSTEIN: What page?

19 MR. WIDIS: Page 9. First paragraph.

20 BY MR. WIDIS:

21 Q. You said, "They took a flashlight and inspected the
22 peanuts to make sure no stacking or piling of tablets
23 had occurred." This was the same method that had been
24 used when IFC treated the Dome in prior successful
25 fumigations," do you see that?

1 A. Yes.

2 Q. Are you referring to their taking flashlight out and
3 looking afterward? What are you referring --

4 A. After what?

5 Q. -- after finishing the application?

6 A. Yes.

7 Q. After emptying the flasks?

8 A. After emptying the flasks, yes.

9 Q. All right. You're saying that they took a flashlight
10 out and looked at it?

11 A. Yes.

12 Q. Looked down. And you're getting -- where are you
13 getting that information?

14 A. From their depositions.

15 Q. And they've talked about what they did after each
16 fumigation, each of the other four?

17 A. Referring to the fumigation from August.

18 Q. Okay. Now, they fumigated from the headhouse on the
19 August 4th, '09?

20 A. Yes, sir.

21 Q. Okay. Is that the way they did it on all previous
22 ones?

23 A. My understanding from their depositions is that they
24 did it exactly like they did the two times before.

25 Q. All right. But the first time, how did they do it?

1 A. They -- I think that -- it was the first time -- the
2 time when they put it on inside. They were able to
3 enter, yes.

4 Q. So your statement that this is the same method is not
5 quite accurate though, right? The first time they did
6 it by walking in. The next three they did it from the
7 headhouse, is that right?

8 A. From the -- yes, the two previous before the August.

9 Q. Okay. Now, let's go to Section 3.1. Their "failure to
10 follow best storage practices."

11 A. Okay.

12 Q. On the top of page 10, you've got, "The aeration system
13 was not run continuously while the Dome was being
14 loaded according to BMP from the peanut associations."

15 A. Yes.

16 Q. Now, again, you're using that as a consequence. Isn't
17 this section about running continuously while it's
18 being loaded for a mechanical ventilation system and
19 not for the aeration that the Severn dome utilized?

20 A. In the case of the dome, the aeration system is the
21 mechanical ventilation system.

22 Q. Is there anywhere in these documents that you looked
23 at, the American Peanut, where they say that you should
24 run an aeration system where you pull from the top down
25 through the pile and out, that says you should run that

1 continuously while you're loading?

2 A. It says you need to run a ventilation system while
3 you're loading. An aeration system can operate as a
4 ventilation system in the case of the dome. That's the
5 case.

6 Q. All right. That's your opinion?

7 A. That is my opinion.

8 Q. All right. But there's nowhere in the documents --
9 they make a distinction between aeration and
10 ventilation and they only refer to ventilation,
11 correct, in those -- in the two previous documents that
12 I've shown you from the American Peanut Shellers
13 Association and the Best Handling?

14 A. Neither one of those documents say that an aeration
15 system is not a ventilation system in my opinion.

16 Q. Well, let's look at it again.

17 A. Okay.

18 Q. Page -- I think it's page 20. There's a distinction
19 very clearly between -- page 20, between aeration --
20 no, I'm sorry, page 13, I think it is, between the
21 ventilation and the aeration system. Doesn't page 13
22 make a clear distinction between what they call
23 aeration systems and ventilation systems?

24 A. "Ventilation system...is designed to remove the excess
25 heat and moisture from the peanuts by pulling outside

1 air through the headspace, the air above the peanuts
2 and below the warehouse roof, and exhausting the
3 moisture and head laden air to the outside."

4 Q. All right. Now, that doesn't say anything about
5 pulling it through the peanuts. It says, take it from
6 the -- by pulling "through the headspace."

7 A. Through the headspace.

8 Q. All right.

9 A. Which an aeration system does also.

10 Q. Okay. But the aeration system here says, "An aeration
11 system is a mechanical system designed to force air
12 through the peanut mass," do you see that distinction?

13 A. I see the distinction there. A ventilation system --
14 an aeration system can also be a ventilation system.
15 The ventilation system, it doesn't necessarily have to
16 not go down through the peanuts.

17 Q. All right.

18 A. All a ventilation system has to do is -- is to cause
19 circulation and remove the headspace air, which an
20 aeration system does also.

21 Q. And bottom of page 13 says, "Design and operating
22 guidelines provided for mechanical and natural
23 ventilation and aeration in the sections that follow."
24 And then we go to natural ventilation, mechanical
25 ventilation and under mechanical ventilation we have

1 this point that you're making about running the
2 ventilation fans continuously.

3 A. Where are you looking, sir?

4 Q. I'm looking at --

5 A. What page?

6 Q. That's 15.

7 A. 15, okay. I'm with you.

8 Q. And on page 20, if you look on aeration, that's where
9 we get to the aeration system, correct?

10 A. Warehouse aeration, yes, at the bottom of page 19.

11 Q. Okay. And, in fact, 20 says, "Aeration systems for
12 farmer stock warehouses is a fairly recent addition to
13 the tools used to manage farmer stock storage," right?

14 A. That's what it says.

15 Q. Okay. So in other words, you've got mechanical
16 ventilation which has been for a while, but the
17 aeration, which the dome had, pulling it down is a
18 fairly recent addition, is that right?

19 A. That's what it says.

20 Q. Okay. You agree or disagree?

21 A. I'm not sure what they mean by "fairly recent." I
22 don't see any dates on that.

23 Q. Now, let's look at your next section. This is on page
24 10.

25 A. Okay.

1 Q. 3.1.b.

2 A. B, okay.

3 Q. You've said, "SPC failed to monitor the peanuts stored
4 in the Dome to determine whether their moisture content
5 was increasing or whether the relative humidity inside
6 the Dome was increasing," did I read that right? Yes.

7 And then you have "consequences" after that. Now
8 here's my question. Are you saying, when you put
9 consequences that these are possible consequences from
10 a failure to do something or are you saying that in
11 your opinion this is what happened as a result of their
12 failure?

13 A. It's a possibility that these things happened.

14 Q. Okay. And each and every instance where you do
15 consequences, what you're saying is, "This is a
16 possibility -- a possible consequence that could
17 follow." You're not saying that this is definitely
18 what happened, is that right?

19 A. That's right.

20 Q. Under "Consequences," under 3.1.b, you have,
21 "Consequences of not monitoring moisture content of the
22 peanuts in storage and the relative humidity of the air
23 within the Dome are heating problems within the Dome
24 and high humidity conditions developing within the Dome
25 due to condensation or temperature rise going

1 undetected." So you're not saying there was
2 condensation within the dome, correct?

3 A. Correct.

4 Q. You're saying that's -- it's possible if you don't
5 follow this -- what's written above, it's possible you
6 could have condensation.

7 A. Correct.

8 Q. Okay. Now, we're going to 3.1.c.

9 A. What page?

10 Q. Page 11.

11 A. Okay.

12 Q. And the last paragraph.

13 A. Okay.

14 Q. The final sentence says, "Therefore, any mold
15 developing in the Dome when unremediated, the causes
16 went unremediated, and, with no change in the Dome
17 environment, any mold was left to propagate to the
18 point of self-heating and combustion."

19 Now, just for the record, you're not saying that
20 the peanuts in the -- it's not your opinion that the
21 peanuts in the dome had mold, it propagated to the
22 point of self-heating and then combusted?

23 A. It's a possibility.

24 Q. It's a possibility.

25 A. Yes.

1 Q. Okay. And as you've said before, you have no expertise
2 in determining the origin and cause of fires, correct?

3 A. Not fires.

4 Q. So it's not your opinion that the -- that there was
5 mold in the dome and that it then progressed to self-
6 heating and to combustion? You're saying that's a
7 possibility?

8 A. It's a possibility. There is indication that there was
9 heating going on within the dome.

10 Q. And is there a difference between self-heating and
11 combustion?

12 A. Yes.

13 Q. And what's the difference? Tell me what you understand
14 the difference to be.

15 A. Well, I'm not a fire engineer, but self-heating is when
16 the temperature is rising from some kind of microbial
17 activity within the product not from the ambient
18 conditions. Combustion would indicate some fire
19 presence.

20 Q. Okay. And just to beat a dead horse, you're not -- are
21 you expressing an opinion as to the cause of the fire
22 at all in this report?

23 A. No, sir.

24 Q. Let's look at 3.1.

25 A. Excuse me?

1 Q. I haven't gotten to it, I'm sorry.

2 A. Okay. I thought maybe I didn't hear you.

3 Q. No, no. I stopped talking for a minute, 3.1.d.

4 A. Okay.

5 Q. And in this one, you're talking about Severn failing to
6 determine if pest problems were getting worse and you
7 say, the consequences were that that would make the
8 product -- or that could make the product unmarketable,
9 correct?

10 A. Correct.

11 Q. And again, that's a possible consequence. You're not
12 saying that an insect problem made the product
13 unmarketable, are you?

14 A. Correct.

15 Q. Let's go to 3.1.e.

16 A. Page 12?

17 Q. 12, yes. And what I believe you're saying here, if I
18 could just paraphrase, is that they have the ability to
19 read the temperature cables more than they did. They
20 didn't read them and a possible consequence was the
21 inability to catch hot spots that may have occurred?

22 A. Correct.

23 Q. Okay. And the hot spots may be from mold, correct?

24 A. Correct.

25 Q. Or hot spots may be from insect infestation, correct?

1 A. Correct.

2 Q. 3.1.f on page 12 still.

3 A. Okay.

4 Q. "SPC failed to appreciate the temperatures increases
5 within the peanuts between March 2009 and July 2009
6 suggested a significant problem requiring action," is
7 basically what you're saying, right?

8 A. Correct.

9 Q. Okay. Now, in that section you are assuming the
10 temperature records are accurate, correct?

11 A. They are what was provided to us.

12 Q. Okay. So you don't know if they're accurate or not,
13 correct?

14 A. They are what was provided. I have no idea whether
15 they're accurate, you know. It's what the temperature
16 cables reported.

17 Q. Okay. And you're not even -- basically, you've made no
18 determination of what developed as a result of these
19 temperature records?

20 MR. EPSTEIN: Objection to form.

21 BY MR. WIDIS:

22 Q. What I mean is have you done any studies or models or
23 any type of calculations to determine the -- what the
24 -- what information you could learn from these
25 temperature readings?

1 A. All we know is the temperatures tell us what those
2 temperatures were at the point of the recording.

3 Q. But you're not giving an opinion as to what you can
4 actually -- what information you can actually draw from
5 reading those temperature records, are you?

6 A. That tells us what the temperature is at that point and
7 compares it. We can compare that to other temperatures
8 within the product. If you know there's a temperature
9 rise in a particular part of the product, then you need
10 to question what causes that rise.

11 Q. Okay. And they should have done -- you're saying
12 Severn should have done that?

13 A. That's what I'm saying, yes.

14 Q. Okay. And that may have told them that there was some
15 kind of biological activity going on, like mold or
16 insect infestation?

17 A. Correct.

18 Q. Okay. On page 13 your second sentence says,
19 "Ultimately, self-heating of the product can lead to
20 ignition and combustion of the peanuts." Again, that's
21 not an opinion as to what happened in the Severn dome,
22 is it?

23 A. No.

24 Q. That is just a statement that self-heating of a product
25 can lead to ignition and combustion?

1 A. Exactly.

2 Q. All right. But it does not reference the Severn dome
3 correct?

4 A. I'm not an expert in that area.

5 Q. Okay. If you have hot spots from mold, do you believe
6 odor will develop?

7 A. Yes, but how that odor is perceived is -- varies.

8 Q. Okay. Have you gone out of commodities that have gone
9 out of condition?

10 A. Yes.

11 Q. And do they produce an odor?

12 A. Some do, some do not. Sometimes it quite odorous and
13 sometimes you don't detect it at all.

14 Q. That first paragraph still on 13. "Compared to corn
15 kernels that have been known to self-heat and combust
16 under high moisture conditions, peanut hulls have at
17 least as much potential as corn kernels for rapidly
18 increasing temperatures during deterioration." Okay?

19 Do you have any -- have you seen any literature or
20 studies or reports that address the tendency of peanut
21 hulls to self-heat?

22 A. Peanut hulls?

23 Q. Hulls.

24 A. No, sir.

25 Q. Okay. That's what you're talking about here, aren't

1 you?

2 A. What I'm talking about here is the potential to produce
3 heat from that particular -- that particular product.
4 The reference here from Fasina shows the heating value
5 of different products and when you compare the hulls,
6 the data that's available for the hulls, it compares to
7 other products which we use actually for direct
8 alternative heating. That's all I'm saying there.

9 Q. Okay. And just so it's clear, you said, "Compared to
10 corn kernels...that have been known to self-heat and
11 combust under high moisture conditions, peanut hulls
12 have at least as much potential as corn kernels for
13 rapidly increasing temperatures during deterioration."
14 So that's the only reason I'm drawing my attention to
15 peanut hulls.

16 A. Yes.

17 Q. Have you seen any literature or studies or reports that
18 addresses the potential for peanut hulls to rapidly
19 increase during -- for the temperature to rapidly
20 increase during deterioration?

21 A. No, that's my opinion based on the heating values
22 that's been reported for those commodities.

23 Q. And the commodities being corn kernels?

24 A. Corn kernels, peanut hulls.

25 MR. EPSTEIN: If you're done with that topic,

1 let me suggest that we take a short
2 break.

3 MR. WIDIS: Sure.

4 (WHEREUPON, the deposition was recessed at
5 11:05 A.M. and reconvened at 11:13 A.M.)

6 BY MR. WIDIS:

7 Q. I'm now looking at page 13, 3.1.g.

8 A. Okay.

9 Q. And the language you've used in this consequence is
10 different so I just want to clarify. What your
11 statement says is, "Consequences of not storing peanuts
12 according to BMP's and not reacting to the increase in
13 temperature due to biological heating led the peanuts
14 inside the SPC Dome to continue to heat to a point of
15 ignition."

16 Now, are you expressing an opinion as to the cause
17 of the fire?

18 A. No, sir.

19 Q. Okay. So when you say that, you are not at all --
20 you're not implying that what Severn did by failing to
21 follow BMPs resulted in an ignition of the peanuts, is
22 that right?

23 A. That's not my area of expertise.

24 Q. Okay. In fact, let me just get this right now. For
25 the record, you have no opinion to a reasonable degree

1 of scientific certainty that Severn's alleged failure
2 to comply with the best management practices for
3 storage, caused the fire, correct?

4 A. I have no fire expertise.

5 Q. Okay. Let me just -- I'd like to get this for the
6 record if I could and then I don't have to ask you
7 anymore question on that.

8 You are unable to express any opinion to a
9 reasonable degree of scientific certainty that Severn's
10 alleged failure to comply with best management
11 practices for the storage of these peanuts caused the
12 fire, correct?

13 A. I'm not a fire expert so I cannot make that statement.

14 Q. Okay. So actually this one sentence, this consequences
15 shouldn't be in your report, wouldn't you agree with
16 that?

17 A. No, sir, I do not agree with that at all. I put it in
18 my report because it's an possibility that it could
19 have done that. Continued heat to the point of
20 ignition -- I'm talking about self-heating with product
21 there.

22 Q. Okay. So basically what you -- what I hear you saying
23 is it would be -- it would better express your opinion
24 if you said that this is a -- one possible consequence
25 would be the ignition of the peanuts, is that -- but

1 then again, you have no --

2 A. That's a possibility.

3 Q. But you have no expertise in fire science?

4 A. Not in ignition.

5 Q. Okay. All right. Page 14, the end of the first -- of
6 the second bullet point.

7 A. Okay.

8 Q. "Mr. Chant attributes this column of peanuts to the
9 misuse of the aeration system." Now, you are relying
10 -- you're making a comment there that Mr. Chant says a
11 soldier or a column is created by the failure to use an
12 aeration system, right, or properly use an aeration
13 system?

14 A. That's -- that was in one of his statements in his
15 deposition, yes.

16 Q. Do you believe that a soldier, you know what I'm
17 referring to, soldiers -- the column of the
18 agricultural product that's clumped, we'll say --

19 A. Yes.

20 Q. -- can be eliminated through the proper use of an
21 aeration system?

22 A. Aeration would help to keep it from forming. Once it's
23 established, the aeration system is not going to tear
24 it down.

25 Q. Do you believe that compaction or loading has anything

1 to do with the formation of a soldier?

2 A. Compaction and loading causes finds and the finds can
3 -- can keep the aeration system from working in that
4 particular area. In that case, it helps to -- to
5 establish this area of mold because the aeration system
6 can't get through that area so that's what the
7 compaction would lend to that process.

8 Q. And now to page 15. You have the statement, "The
9 correct conditions for mold in the center of the Dome
10 allowed mold to form in the soldier undisturbed."
11 Again, what you mean is that's a possibility.

12 A. A soldier by definition has -- has mold in it. That's
13 per Dr. Butts and other industry statements so if there
14 were a soldier in there, then it had mold in it.
15 That's how soldiers form.

16 Q. Okay. But you don't know if there was a soldier in the
17 dome or not?

18 A. No, there were the two years before so R.P. Watson
19 testified that he assumed there was another one.

20 Q. And the last paragraph before we get to fumigation,
21 "Sensing the temperature would have detected the rising
22 temperature in the soldier as mold formed in the
23 soldier. Responding to the temperature rise would keep
24 the temperatures in check, preventing further damage to
25 the product and further deterioration to the point of

1 combustion."

2 Q. You're not expressing a point -- an opinion that there
3 was combustion of the peanuts, correct?

4 A. Correct.

5 MR. EPSTEIN: You mean that there was
6 combustion of the peanuts as the result
7 of something?

8 MR. WIDIS: Good point.

9 MR. EPSTEIN: There was combustion of the
10 peanuts, I can assure you that.

11 THE WITNESS: Exactly.

12 MR. EPSTEIN: Otherwise, you wouldn't be
13 sitting in that chair questioning that
14 witness.

15 THE WITNESS: I don't think that's the
16 question, is it?

17 MR. WIDIS: I sit corrected. Thank you.
18 I'll even take that speaking objection.

19 BY MR. WIDIS:

20 Q. You're not saying that -- that -- you're not giving an
21 opinion that the further deterioration of the soldier
22 led to the combustion of the peanuts, are you?

23 A. I can't say that that led to the combustion of the
24 peanuts.

25 MR. EPSTEIN: If you want to stipulate there

1 was no combustion of the peanuts, we can
2 -- we can get this case resolved pretty
3 quickly.

4 MR. WIDIS: I'm just asking questions.

5 BY MR. WIDIS:

6 Q. We're going to move now to fumigation.

7 A. Okay.

8 Q. On page 15, you say, "Review of the Degesch product
9 label and testimonies and reports from IFC indicate
10 that IFC fumigators were within the law in their
11 methods and followed industry practices."

12 Now, where are you getting what you consider to be
13 the industry practices? Where are you drawing that
14 information?

15 A. It comes from the following of the label and industry
16 practices as far as the storage of the -- the product
17 in the two documents we just discussed, but following
18 industry practices, it follows the label. That's the
19 law.

20 Q. And all I'm talking about now is fumigation, not the
21 storage practices.

22 A. Okay. Okay.

23 Q. Purely fumigation.

24 A. Fumigation.

25 Q. And when you talk about industry practices, you're

1 solely relying on the label, is that right?

2 A. Yes, sir.

3 Q. You are not a certified fumigator, correct?

4 A. No, I manage people who are.

5 Q. Okay. And now have you --

6 A. I also train people who are.

7 Q. And I'll ask you about that.

8 A. Okay.

9 Q. Have you participated in any meetings with the
10 environmental protection agency regarding the language
11 that needs to be included in the applicator's manual?

12 A. No, sir.

13 Q. Okay. Have you had any involvement at all in
14 determining what language is included in the
15 applicator's manual?

16 A. No, sir.

17 Q. Okay. How many fumigations of commodities,
18 agricultural commodities, have you performed using some
19 form of phosphine gas?

20 A. Wow. At least 20.

21 Q. When did you start doing this?

22 A. That experience would have started in 2005.

23 Q. All right. And how did that come about?

24 A. Through the projects that -- and through my research
25 engineer position at Oklahoma State University.

1 Q. And what were you asked to do that led you to the
2 fumigation?

3 A. We were working on a closed loop fumigation system at
4 Broken Arrow.

5 Q. What is Broken Arrow?

6 A. Broken Arrow, Oklahoma. It's a city.

7 Q. And when I use the term phosphine gas, would all those
8 20, were they all involving closed loop systems?

9 A. No, sir.

10 Q. Okay. Have you ever performed or participated in
11 fumigation of peanuts?

12 A. No, sir.

13 Q. How many fumigations of agricultural commodities have
14 you personally performed or participated in which
15 involved the application of aluminum phosphide tablets?

16 A. Seventeen, all but three were tablets.

17 Q. And what were the other three?

18 A. ECO FUME on railcars.

19 Q. How many closed loop systems have you -- have you
20 participated in the fumigation involved in the closed
21 loop systems?

22 A. Yes.

23 Q. And do you consider those to involve aluminum phosphide
24 tablets?

25 A. Yes, sir.

1 Q. In those situations, are the tablets -- does the
2 reaction occur inside the structure or outside the
3 structure?

4 A. Inside the structure.

5 Q. So it's still applying the tablets, the reaction
6 occurs, and then your closed loop system would
7 distribute the gas?

8 A. Yes, sir.

9 Q. Have you personally broadcast aluminum phosphide
10 tablets?

11 A. Yes.

12 Q. Okay. What different ways have you broadcast the
13 tablets?

14 A. By shaking the canister through the manhole on a
15 concrete silo. Also, by -- with a gloved hand,
16 spreading them and then I probed once.

17 Q. Okay. So you've probed once, right?

18 A. Yes.

19 Q. And the other would be 16 times?

20 A. Yes.

21 Q. You said 20 --

22 A. Yes. Yes.

23 Q. -- you said 20 when you used aluminum phosphide, 17
24 when you used tablets, one when you used probing, so
25 the other ones -- were they surface -- were the other

1 16 surface applications?

2 A. Surface -- 15 were surface applications and one was a
3 dispenser that loaded the tablets in as we were loading
4 the product into the vent.

5 Q. All right. Now, what -- what commodities have you
6 fumigated?

7 A. Corn, wheat, barley, oats -- corn, wheat, barley and
8 oats.

9 Q. How many of those would you say you've dropped or
10 distributed from the top of the structure down to the
11 surface of the commodity?

12 A. All except the probed and the dispenser one.

13 Q. And in each of those instances where you've distributed
14 the tablets from the outside of the structure down into
15 the --

16 A. Through the manhole, yes.

17 Q. -- through the manhole onto the surface of the
18 commodity, were you able to see the entire surface of
19 the commodity?

20 A. Yes.

21 Q. So I'm accurate to say, you have never broadcast
22 tablets into a structure from top -- from the top of
23 the structure down onto the commodity when you couldn't
24 see the entire surface?

25 A. That's true.

1 Q. Okay. And you've never, actually, entered a structure
2 and walked along and distributed while walking along
3 the surface of the commodity?

4 A. No, sir.

5 Q. Have you seen that done?

6 A. No, sir.

7 Q. Are you familiar with stepping the commodity in?

8 A. I'm familiar with that term.

9 Q. But you've never seen it done?

10 A. No.

11 Q. What's the most -- the highest number of tablets or
12 pellets that you've distributed in a single fumigation?

13 A. I would estimate 20 flasks.

14 Q. Were those tablets or pellets?

15 A. Those were pellets.

16 Q. Have you ever distributed tablets?

17 A. Yes.

18 Q. What brand of aluminum phosphide have you used?

19 A. Fumitoxin.

20 Q. Has it always been Fumitoxin?

21 A. I would have to check. That's -- that's the one we
22 usually use, yes, Fumitoxin.

23 Q. It's cheaper than the Phostoxin, isn't it?

24 A. Yes, it is.

25 Q. What's the largest size of structure that you've

1 fumigated?

2 A. Probably the largest size was when we worked Thadd
3 Bigler was the fumigation company at Port of Catoosa,
4 66 -- or 6 million bushels.

5 Q. And what commodity?

6 A. It could be any commodity. We were doing wheat at the
7 time, but that facility handles --

8 Q. And describe the structure for me.

9 A. That was a flat storage, horizontal storage where
10 material is loaded from a conveyor at the top, has
11 piles.

12 Q. And when you fumigated that, was that from a single
13 access point?

14 A. I don't remember on that one. Thadd was in charge of
15 it. I was just there that day.

16 Q. Did you participate at all or did you observe?

17 A. I observed -- observed on that one. That's not
18 included in my 20.

19 Q. Well, what's the largest that you personally have
20 fumigated, that you participated in -- in the
21 fumigation.

22 A. A steel grain bin, 90 foot in diameter, 750,000 bushels
23 of barley.

24 Q. And how many access hatches?

25 A. One.

1 Q. One. But you could see the entire surface of the
2 commodity?

3 A. Yes, you could.

4 Q. Okay. Do you think it's a safe practice to fumigate a
5 commodity and broadcast aluminum tablets onto the
6 surface of a commodity when you cannot see the entire
7 surface?

8 A. I think it would be safer if you could see the entire
9 surface.

10 Q. All right. Do you think it's safe --

11 A. Yes.

12 Q. -- to do it when you cannot see the entire surface?

13 A. I think it's -- there's a degree of safety in that yes,
14 but it would be safer if they could see it.

15 Q. I'm sorry. What does that mean, "there's a degree of
16 safety?" What does that mean?

17 A. I think that it's safe. I think it would be safer, it
18 would be more secure if they could see it.

19 Q. All right. You teach classes, right?

20 A. Yes, sir.

21 Q. To applicators?

22 A. Yes, sir.

23 Q. If a student raised their hand and asked, "Can I -- do
24 you think it's safe for me to fumigate from a hatch
25 down onto a surface when I can't see all of the surface

1 itself," what would you tell them?

2 A. I would tell him to make every effort he could to see
3 all the surface.

4 Q. Why would -- strike that.

5 Could you have done a closed loop system on the
6 dome?

7 A. Yes, it would be very expensive.

8 Q. But it could be done?

9 A. It could be done, yes.

10 Q. And would you have had -- would there have been a way
11 to introduce the phosphine gas into that closed loop
12 system without applying the fumigant onto the surface
13 of the commodity?

14 A. Not using tablets or pellets, not safely. I actually
15 have had a research project in that area and --

16 Q. What research project?

17 A. It was an internal project that Dr. Noyes started back
18 when I was a research engineer and we were trying to
19 develop a cabinet where you could place the tablets
20 externally to the system. Never found a very good way
21 to keep that safe from people making mistakes with it
22 so --

23 Q. What would happen? What would --

24 A. The concentrations would increase to some level that we
25 don't know what that level would be. We just couldn't

1 control the concentrations, humidities --

2 Q. Were you concerned about a fire happening or explosion?

3 A. We were more concerned about leakage into the
4 atmosphere from the cabinet and the hazard to the
5 people that were doing the application that way.

6 Q. Was fire a concern?

7 A. Well, it would be a consideration, yes.

8 Q. And that's because your concentration was getting too
9 high?

10 A. It's a possibility, yes.

11 Q. And when you put those tablets into the cabinet, how
12 were they -- what was causing them to react?

13 A. Moisture in the air.

14 Q. Were they piled inside the cabinet?

15 A. They -- not in the cabinet we were building, no.

16 Q. How many tablets did you put in the cabinet?

17 A. It was a very small cabinet. It was a test cabinet.

18 Q. Right.

19 A. So one flask.

20 Q. And one flask created too high a concentration you
21 felt?

22 A. We were afraid that that would be the possibility if it
23 were -- if it were production size, yes. We couldn't
24 -- we could not control that environment well enough in
25 the production size.

1 Q. In production size, how many would you have thought
2 would have gone into the flask?

3 A. I don't know. We didn't get that far.

4 Q. The idea didn't seem very good at the end?

5 A. Well, yeah, it just -- we ran out of funding for one
6 thing so the project had to end and we just never
7 developed it that far.

8 Q. Could you have inserted phosphine gas into a closed
9 loop system, gas itself without -- not by generating it
10 through the tablets, but just gas into the phosphine --
11 into the closed loop system within the dome?

12 A. From a generator from ECO FUME, yes.

13 Q. Okay. Do you think using a generator with ECO FUME and
14 using a closed loop system would have been a safer way
15 to fumigate the dome?

16 A. No, sir.

17 Q. Why not?

18 A. There's no advantage to it. It's very expensive for
19 one thing. We've fumigated many, many, many facilities
20 out there in the same manner that this dome was
21 fumigated without any problems. It's legal. It's on
22 label.

23 Q. Have you ever been in a structure where they've
24 distributed 49,000 tablets onto the surface in an area
25 they couldn't see?

- 1 A. No, sir.
- 2 Q. The times where you are distributing tables from the
3 manhole down onto the commodity, did you make sure that
4 your tablets were not piling or stacking?
- 5 A. Yes.
- 6 Q. Okay. And why is that?
- 7 A. Because the label says to do that.
- 8 Q. And what do you feel the risk is of piling and stacking
9 of tablets?
- 10 A. Whatever the label says.
- 11 Q. Do you know what it says?
- 12 A. Yes, I know what it says.
- 13 Q. What does it say?
- 14 A. It says that there's a potential for fire.
- 15 Q. Okay. Do you think that has any scientific basis?
- 16 A. I don't know.
- 17 Q. The EPA mandates it, don't they?
- 18 A. They mandate it.
- 19 Q. Okay. When you teach a class, do you instruct your
20 students not to pile and stack tablets?
- 21 A. I instruct them to follow the label and that's what the
22 label says, yes.
- 23 Q. And do you tell them that there's a risk of fire?
- 24 A. That's what the label says, yes.
- 25 Q. But I'm asking, do you --

1 A. Yes.

2 Q. -- you instruct your students? You tell them, "Don't
3 pile and stack it and the reason is it could cause a
4 fire."

5 A. The possibility of a fire is there, is what I tell
6 them.

7 Q. Okay. When you distribute tablets from the -- from a
8 surface, I mean, from the top down into the surface of
9 a commodity, do you have a plan in place as to what you
10 would do if you saw piling or stacking of tablets?

11 A. No, sir.

12 Q. What do you think you would do?

13 A. I would try to disrupt those.

14 Q. Meaning go in and reposition it or do something to
15 reposition the tablets?

16 A. Yes.

17 Q. Okay. Isn't that a plan?

18 A. It's not a very specific plan, but I guess that could
19 be considered a plan.

20 Q. In each of the times that you have distributed the
21 aluminum phosphide tablets from the top of the dome and
22 you've put them onto the surface, would it have been
23 possible for you to enter the dome -- enter the
24 structure if you needed to, to reposition the tablets
25 if you saw piling?

1 A. Yes, sir.

2 Q. Do you think it's proper to do a fumigation if you have
3 no way to rectify a piling situation if you create one?

4 A. I don't think I have an opinion on that. Ask the
5 question again.

6 Q. Do you think it's proper for a fumigator to do an
7 application of tablets if he's got no plan or ability
8 to rectify a situation if he causes piling?

9 A. If he follows the label, yes. He needs to follow the
10 label. That's the law. He follows the label then it's
11 proper.

12 Q. Is it possible to pile tablets?

13 A. I don't know. I've never piled tablets in that
14 situation.

15 Q. Okay. The applicator's manual warns against piling or
16 stacking, doesn't it?

17 A. Yes, it does.

18 Q. Do you think it would warn against piling or stacking
19 tablets if it was impossible to pile or stack tablets?

20 A. I have no idea. I didn't write that -- I wasn't a part
21 of the writing of the label.

22 Q. Now your report, on page 15, you list some of the
23 points that IFC did that were proper according to the
24 label, is that right?

25 A. Yes, sir.

1 Q. All right. Did you list anything that they did that
2 you felt was improper?

3 A. No, sir.

4 Q. Did IFC do anything that you felt was improper with
5 regard to the application or their entire fumigation
6 process?

7 A. They didn't do anything that was not on label. They
8 were on label through the entire process. If I were to
9 give them suggestion on improvement of their process,
10 being able to see the entire surface would certainly be
11 an improvement.

12 Q. Now on page 16, you talk about the gas detection
13 equipment being on hand, is that right?

14 A. Yes, sir.

15 Q. I mean, that's basically what you're saying and so they
16 were correct in that they had gas detection equipment
17 there?

18 A. Yes, sir.

19 Q. Did IFC do monitoring of the concentration of the gas?

20 A. They were not able to do the post-monitoring of the gas
21 before they opened the dome because it was on fire.
22 That happened -- it caught on fire before they did
23 their ending of the fumigation. I'd have to go back
24 and look at their report to see what they recorded on
25 that so I know they wrote down what equipment they were

1 using.

2 Q. All right. Well, having equipment is one thing and
3 using it is another.

4 A. I'd have to look at the report.

5 Q. You would agree with that?

6 A. I would agree.

7 Q. Okay. And would you agree that to do a proper
8 application and fumigation process, they should be
9 monitoring the concentration of the gas at certain
10 intervals from the time they insert it until it's
11 aerated at the end?

12 A. Inside the dome or outside the dome?

13 Q. Well, either, let's start with outside the dome.

14 A. Outside the dome, they should be monitoring the
15 perimeter areas where people work.

16 Q. And that's very important, isn't it?

17 A. Yes.

18 Q. I mean, that's one of the reasons you do monitoring,
19 for the safety of --

20 A. The safety --

21 Q. -- bystanders or workers, right?

22 A. Exactly, yes.

23 Q. And in fact, the fumigation plan calls for them to do
24 that?

25 A. Yes.

1 Q. Isn't that correct?

2 A. That's correct.

3 Q. Have you seen any documentation that would support the
4 monitoring of the concentration of the phosphine gas
5 outside the structure was conducted at any time after
6 August 4th up until the time of the fire discovered on
7 August 11th?

8 A. I don't recall.

9 Q. Did you request any of that information?

10 A. No.

11 Q. Okay. Do you recall it being provided to you?

12 A. I -- their reports were provided to me. We'd have to
13 go back and refer to those to get that information.

14 Q. I'm going to show you what we've marked as Exhibit 23.

15 A. Okay. Thank you.

16 (WHEREUPON, Exhibit Number 23 previously
17 marked for identification was passed to
18 the witness for review)

19 BY MR. WIDIS:

20 Q. Does that document show you any monitoring of
21 concentration that was done by IFC outside of the dome?

22 A. This document does not.

23 Q. And you would agree that IFC should be monitoring the
24 concentration of the phosphine gas outside the dome?

25 A. At the perimeters where people work, yes.

1 Q. Okay. Let me show you what we've marked as Exhibit 51.
2 (WHEREUPON, Exhibit Number 51 previously
3 marked for identification was passed to
4 the witness for review)

5 BY MR. WIDIS:

6 Q. It's just the -- I'll tell you this is the IFC
7 Fumigation Management Plan. Have you see this?

8 A. Yes, sir.

9 Q. And this is the applicable one for the -- well, this is
10 the only one we have for the dome, is that your
11 understanding?

12 A. That's my understanding.

13 Q. All right. The first paragraph at the end, it says --
14 MR. EPSTEIN: First page, where are you?

15 MR. WIDIS: I'm sorry. Well, first page,
16 first paragraph.

17 BY MR. WIDIS:

18 Q. It says, "In addition to this plan, further information
19 on the specific fumigation performed can be found on
20 'IFC Fumigation Service Reports' and 'Monitoring
21 Records' used during the actual fumigation." See that?

22 A. That's what it says, yes.

23 Q. Okay. You don't see anything regarding the
24 concentration levels on the fumigation service report,
25 which you've just looked at, right?

1 A. Not on this one.

2 Q. And you have not seen any monitoring records from IFC
3 for this fumigation done that was performed on August
4 4th, 2009, have you?

5 A. I don't recall seeing any.

6 Q. Mr. Epstein has not given you -- you haven't received
7 any monitoring records for the fumigation that was
8 performed by IFC on August 4th, 2009, is that right?

9 A. I don't recall seeing any.

10 Q. Is that something you would want to have looked at
11 before you gave an opinion as to the -- whether this
12 was a proper application and fumigation by IFC?

13 A. Not necessarily. Because my focus was on the inside of
14 the dome and the process that happened with the dome,
15 not with the safety at the perimeters and that's where
16 by label, that's where they should have been monitored.

17 Q. But the monitoring of the phosphine gas outside of the
18 structure is a very important part of any fumigation,
19 wouldn't you agree?

20 A. At the perimeters where people work, yes.

21 Q. Now, if you would turn to page 7.

22 A. In the FNP?

23 Q. In the FNP.

24 A. Okay.

25 Q. You see the third box down, it says, Application

1 Procedures. And then it says, the third box down
2 "Fumigant is applied from outside the area being
3 treated," see that?

4 A. Yes.

5 Q. Okay. Now, the first fumigation that was done around
6 July of 2007 when this fumigation management plan was
7 written, was done inside the dome, wasn't it?

8 A. Yes.

9 Q. And so that's correct, that the fumigant is applied
10 from outside areas is not what happened here, so you
11 would not check that box, right?

12 A. That's correct.

13 Q. Okay. Did IFC, when they came back to do the next
14 fumigant, did they realize -- was it your understanding
15 that the conditions within the dome had changed and the
16 fumigation would have to be performed differently from
17 the first fumigation?

18 A. They couldn't enter the dome, yes.

19 Q. Shouldn't IFC have issued a new management plan at that
20 point since the conditions were such that the
21 application would be different?

22 A. There was nothing that needed to be changed on the
23 plan. They reviewed it and found, I think, it needed
24 to be changed.

25 Q. Shouldn't, at the very least, the third box be checked?

1 A. Okay. There's -- again, there's a perception and
2 understanding issue here. If you take the flask and
3 put them down into the hull and distributed them,
4 they're distributed inside the dome.

5 Q. And that's your understanding?

6 A. That's my understanding.

7 Q. That if -- you can stand outside the structure, if you
8 put the -- if you break the plane of the -- of the
9 warehouse, that's now inside, is that right?

10 A. Exactly, yes, sir.

11 Q. Is there any regulation that say that?

12 A. Not that I'm aware of.

13 Q. All right. Is that what you teach your students?

14 A. Yes, sir.

15 Q. Okay. Now, you've read Mr. Ryman's deposition, haven't
16 you?

17 A. Yes, sir.

18 Q. Okay. And this is the one that he was the expert
19 witness. Did you see Mr. Ryman state that you needed
20 to do a fumigation plan every time you performed a
21 fumigation?

22 A. I don't recall that statement. Do you have his here
23 that we could look at?

24 Q. No, I don't.

25 A. Okay.

1 Q. But let me put it this way, if Mr. Ryman had said that,
2 would you agree or disagree?

3 A. I would disagree with that.

4 Q. Okay. So you don't think you need to do a fumigation
5 plan every time you do a fumigation?

6 A. No, it needs to be reviewed and revised if appropriate.

7 Q. Did it appear to you from reading Mr. Turner and Mr.
8 Lilley's deposition that any alternative methods of
9 fumigation were considered other than on the second
10 time, other than going up to the headhouse, opening the
11 hatch and distributing the tablets?

12 A. Which fumigation are --

13 Q. Second one.

14 A. The second one.

15 Q. First one, they go inside and put it on the floor. The
16 second one, now the dome is to the point where you
17 can't enter the outside and the only opening that you
18 can get to on the dome would have been through the
19 headhouse.

20 A. Yes, I saw no indication of their suggestions of that.

21 Q. If you were presented with this situation where you now
22 have to fumigate a dome, would you have -- and what you
23 know as the headhouse is on top and access is through
24 the headhouse, would you have considered various
25 alternative methods of fumigation?

1 A. I would suggest to Mr. Watson that -- that there are
2 alternatives but they're more expensive, not
3 necessarily safer, but these are your options when we
4 do this fumigation. That would be something I would
5 talk to any customer about whether it's a dome or any
6 other structure. These are the possibilities that we
7 have to offer to that customer and these are the
8 expenses and these are the pros and cons of those
9 different methods.

10 Q. Did you feel there was a certain risk that was created
11 by the method that was chosen by Mr. Turner and Mr.
12 Lilley --

13 A. No, sir.

14 Q. -- to fumigate the dome?

15 A. No, sir.

16 Q. Do you think there was a safer way to fumigate the dome
17 other than the manner in which IFC did it --

18 A. No, sir.

19 Q. -- the last three times?

20 A. No, sir, not necessarily.

21 Q. What do you mean, "not necessarily"?

22 A. Well, there's risks any time you do an application so
23 no one method is not necessarily safer than another.
24 There's a lot of variables that play into that.

25 Q. And what risks are there when you do it?

1 A. Well, with the canisters, if one breaks open or is
2 dropped, faulty, I mean, you've got a risk there so
3 there's risks any time you handle aluminum phosphide.

4 Q. And risk of fire is one that you have to consider when
5 you're doing a fumigation, correct?

6 A. Yes.

7 Q. In order -- now, you're supposed to do a pre-fumigation
8 inspection at the location, correct?

9 A. Yes. Yes.

10 Q. All right. In order to do a pre-fumigation inspection,
11 wouldn't you need access to the commodity itself?

12 A. What do you determine access?

13 Q. By that I mean, don't you need to determine the
14 condition of the commodity?

15 A. No, sir.

16 Q. Well, on the IFC service report, they talk about the
17 temperature of the commodity, do you see that?

18 A. I see that, yes.

19 Q. All right. Is that something -- they've got it on
20 their sheet, is that something that the applicator
21 should try and determine?

22 A. Yes, sir.

23 Q. How about determining if there's any wet areas or high
24 moisture areas in the commodity, is that something a
25 fumigator should try and determine before he does his

1 fumigation?

2 A. He needs to look for free-standing water.

3 Q. And that's it?

4 A. Yes, sir.

5 Q. Would you agree that if you can't enter a structure
6 safely in order to determine if there are any hazards
7 then you should consider other alternative methods of
8 application?

9 A. No, you can look in from the outside and observe.

10 Q. Section 3.2.b.

11 A. And what page are you looking?

12 Q. Page 17.

13 A. 17, okay. Here we are.

14 Q. You say, in your "work as a stored product engineer,"
15 you've demonstrated "for fumigation certification
16 classes many times the handling of Fumitoxin tablets
17 using 'demonstration tablets' that have many of the
18 same physical properties as Fumitoxin but without the
19 fumigant included," correct?

20 A. Correct.

21 Q. Okay. Now, what class are you teaching?

22 A. The continuing education classes that all fumigators
23 have to take and the certification classes.

24 Q. How many people are actually teaching that class? I
25 mean, are you the sole instructor or are there others?

1 A. We have an entomologist that works with me so two of
2 us.

3 Q. And who decides if they get the certification?

4 A. The Department of Agriculture.

5 Q. Do they take a test with you?

6 A. Yes, sir.

7 Q. Is that the test that's used to determine if they get
8 the certification?

9 A. There's a written test first they have to pass and then
10 they take our training. We call it a practical. And
11 then they take a test at the end of the day on that and
12 then those results go to the Department of Ag in
13 Oklahoma or whatever state, Missouri, Texas, Kansas.
14 And the Department of Ag issues that certification
15 based on the results.

16 Q. And how many -- how many of those classes have you
17 taught?

18 A. Gosh, let me see, two, four, six, eight a year for the
19 past six years.

20 Q. Okay. It's a one day class?

21 A. Yes.

22 Q. And what do you cover in that one day class?

23 A. Sealing, applications, dosage calculation, insect
24 characteristics and management of the product and
25 storage of the product itself.

1 Q. And how long does the class last?

2 A. Eight hours.

3 Q. When do you give the test?

4 A. At the end of the day.

5 Q. How long a test is it?

6 A. Hour and a half.

7 Q. So is that part of the eight hours?

8 A. Yes.

9 Q. So it's six and a half, roughly.

10 A. Yes.

11 Q. Are there breaks and lunch and --

12 A. There's breaks and lunch so they're probably in their
13 seats -- the classroom work is three hours in their
14 seats in the morning and then we go outside and
15 actually have hands-on fumigation practice.

16 Q. And that's the practical you were talking about?

17 A. That's the practical, yes.

18 Q. And explain -- describe for me the practical that you
19 do.

20 A. The whole day is considered the practical.

21 Q. Okay.

22 A. So they -- they're in the classroom in the morning and
23 that's where we lecture and the power points and
24 discuss and all. The afternoon we go out to our
25 research bins and we have them perform an application

1 of tablets and use their equipment, their monitors to
2 measure the concentrations.

3 Q. And what do you they use? What type of product do they
4 use when they do this?

5 A. Fumitoxin.

6 Q. And how many tablets are they given to distribute?

7 A. It depends on which structure we do that day. If we
8 use the 500 bushel bins, they're given ten. If we use
9 a barrel, they're given two.

10 Q. So the applicators are given ten tablets, is that what
11 you're saying?

12 A. Yes.

13 Q. And how do they distribute it?

14 A. From the headspace, port in the top of the bin.

15 Q. Do they just one at a time go out and distribute it or
16 --

17 A. Yes.

18 Q. I mean, how many people in the class?

19 A. Any place from two to twelve.

20 Q. And they would go to the headspace and --

21 A. Distribute it.

22 Q. -- do they put the ten tablets in their hands?

23 A. A gloved hand.

24 Q. Gloved hand, it's not out of the flask itself.

25 A. No, a gloved hand.

1 Q. And they distribute out onto the product?

2 A. Yes.

3 Q. Okay. Are you there when they do that?

4 A. Yes.

5 Q. Okay. Do you instruct them not to throw it right where
6 the other person has thrown it?

7 A. They're in separate bins.

8 Q. Oh. And during class, you've instructed them not to
9 pile or stack. Don't allow the tablets to pile or
10 stack, correct?

11 A. Yes, I have.

12 Q. Okay.

13 A. Because that's on the label.

14 Q. That's on the label.

15 A. Yeah.

16 Q. And you've warned them that if they pile or stack, it
17 is possible that a fire could occur?

18 A. I -- that's what I instruct, yes.

19 Q. Now, did you take any part in drafting the fumigation
20 manual from Oklahoma State?

21 A. I reviewed it.

22 Q. I'm talking about this (pointing).

23 A. Right. I have reviewed it for them. I didn't write
24 it.

25 Q. Okay. Do you believe that this contains valid

1 information?

2 A. Yes, sir.

3 Q. Okay.

4 MR. WIDIS: This is my only copy. I'll be
5 glad to put it as an exhibit if I could
6 get the original back.

7 MR. EPSTEIN: Do you have several questions
8 from that document?

9 MR. WIDIS: Just a couple.

10 MR. EPSTEIN: However you want to do it is
11 fine with me.

12 MR. WIDIS: Okay. If you could make a couple
13 of -- three pages is all I'm going to
14 talk about so if you just want to do
15 three pages and then we'll mark that.

16 MR. EPSTEIN: After the deposition is over.

17 MR. WIDIS: Yes, we'll mark that. Okay. So
18 we'll mark the pages as -- what exhibit?

19 THE REPORTER: It's going to be 322.

20 MR. WIDIS: 322.

21 (WHEREUPON, Exhibit Number 322 will be marked
22 for identification and it was passed to
23 the witness for review)

24 BY MR. WIDIS:

25 Q. All right. I just want you to take a look at what

1 we're marking as 322 and just identify that if you can.

2 A. That's our fumigation manual that we do pesticide
3 application training from.

4 Q. And do you believe it contains reliable information
5 regarding fumigation?

6 A. Yes, sir.

7 Q. And do you believe that the warnings contained in that
8 fumigation manual are based on valid scientific
9 principles?

10 A. They're based on what is on the label, yes.

11 Q. Do you think the warnings contained in the book are
12 based on valid research?

13 A. Yes.

14 Q. Do you think the book contains misinformation?

15 A. Not that I know of.

16 Q. I want you to look at page 31.

17 A. Okay.

18 Q. All right. And let me just -- I'm sorry. I'll give it
19 right back to you. The statement says, "Tablets or
20 pellets should be placed in shallow layers, never
21 stacked on top of each other. Stacking causes the ash
22 on the outside of the mass to seal off the interior
23 pellets/tablets, slowing or stopping their
24 decomposition and gas release. This creates a hazard
25 to personnel and risk of explosion or fire," do you see

1 that?

2 A. That's what it says, yes.

3 Q. Do you have any -- do you believe that's based on valid
4 scientific principles?

5 A. Somebody's experience -- I don't know what that -- what
6 that scientific experiment would have been. I don't
7 see any reference here. Apparently, they had seen that
8 or had some kind of experience that led to that
9 statement.

10 Q. But your university has included it in its fumigation
11 manual, correct?

12 A. Yes. Yes.

13 Q. And do you stand by that?

14 A. Yes, sir.

15 Q. Okay. Were there any -- that's all I have on that.

16 A. Oh.

17 Q. Were there any --

18 MR. EPSTEIN: You'll mark it afterwards and
19 tell me which pages?

20 MR. WIDIS: Yes, sir.

21 BY MR. WIDIS:

22 Q. Was it your understanding that there were lights inside
23 the dome?

24 A. I had no understanding either way.

25 Q. Was it your understanding that the IFC fumigators could

1 see the pile of peanuts in the dome without the use of
2 a flashlight?

3 A. No, sir.

4 Q. It was your understanding that they were distributing
5 the tablets from a single hatch, right?

6 A. Correct.

7 Q. If there were additional hatches available to them in
8 that headhouse, do you believe they should have used
9 those as well?

10 A. No.

11 Q. Why?

12 A. Not necessarily. I don't think it would have improved
13 the process.

14 Q. You don't believe it would be -- you would be able to
15 more widely distribute tablets if you used other access
16 points?

17 A. Not necessarily in the geometry of that dome, no.

18 Q. The dome is how -- what's the diameter of the dome?

19 A. It's a 190 feet, yes.

20 Q. Okay. You don't believe it would be -- you'd get a
21 better distribution if you used three points, say, as
22 opposed to one?

23 A. It would depend on where those hatches are.

24 Q. Is it your understanding they were distributing the
25 49,000 tablets down into a hole that they couldn't see

1 during the time they were distributing?

2 MR. EPSTEIN: Objection to form.

3 THE WITNESS: They distributed the tablets --
4 my understanding is they distributed the
5 tablets through the manhole or through
6 this hatch in the top of the dome and
7 they could see it with the use of a
8 flashlight.

9 BY MR. WIDIS:

10 Q. Right. And at the time they're distributing and
11 they've got their flasks, breaking the plane of the
12 warehouse inside the dome and broadcasting from the
13 flasks, you would agree that they can't see down into
14 the pile because it's dark?

15 A. At that point, they probably could not see, that's
16 correct.

17 Q. Is it your understanding that Mr. Turner and Mr. Lilley
18 have no idea how far they can fling a tablet from the
19 flask?

20 A. I don't know what they know about that.

21 Q. All right. Did you read that in their deposition?

22 A. I did not read that in the deposition.

23 Q. Would you agree that if you don't know how far you can
24 throw a flask, I mean, distribute a tablet from a flask
25 and you're shaking it down into a dark hole, you really

1 have no idea where the tablets are going?

2 A. I don't think I could say that one way or the other. I
3 don't have an opinion on that.

4 Q. No opinion?

5 A. No opinion.

6 Q. Do you think if someone asked you, "I'm going to put
7 flasks into a dark hole and shake it back and forth and
8 I don't know how far I can throw it," you would have
9 some ability to tell them where those tablets were
10 going?

11 A. Yes, I think I would have the ability to know where
12 they're going.

13 Q. All right. Do you think you could tell them that
14 there's no way those would pile up?

15 A. I don't think it's a certainty that I could say they
16 wouldn't, whatever pile is.

17 Q. Do you know whether Mr. Turner or Mr. Lilley had any
18 plan in place to fix a potential problem of piling if
19 they would have seen it?

20 A. Their deposition said they did not.

21 Q. Do you think that's a safe practice to do a fumigation
22 where you're dropping tablets onto a surface of a
23 structure if you have no plan to rectify it if you see
24 piling?

25 A. It's a legal practice. It would be prudent if they

1 would have a plan.

2 Q. Would you agree that if a fumigator can't ensure that
3 his end product would be free of piling that he
4 shouldn't perform the fumigation?

5 A. Could you ask that again, please?

6 Q. Sure. Would you agree that if a fumigator cannot
7 ensure that his end product would be free of piling
8 then he should refuse to perform the fumigation?

9 A. No, I don't agree with that.

10 Q. Why not?

11 A. We don't know what a pile is. We don't know how many
12 tablets that is. We don't know enough information to
13 state that.

14 Q. Have you ever had a flask flash?

15 A. I have not, no.

16 Q. Have you heard of it?

17 A. Yes.

18 Q. And you -- it's your understanding that that does
19 happen on occasion?

20 A. On occasion, yes.

21 Q. All right. And what do you understand that flashing of
22 the flask to be?

23 A. It's the moisture in the air and the interaction with
24 the phosphine gas and the moisture in the air at the
25 point of opening the flask.

1 Q. Is the flashing of a flask the ignition of the
2 phosphine gas at ambient temperatures?

3 A. Yes.

4 Q. And is the flashing of the flask the ignition of the
5 phosphine gas at ambient temperatures without the
6 presence of liquid water?

7 A. There's -- the humidity has to be high in the air, but
8 no, there's no free-standing water.

9 Q. Okay. So that's a correct statement what I said.

10 A. That's a correct statement.

11 Q. Okay. Back to your report, 3.2.b.

12 A. Okay.

13 Q. All right. You said, you've "demonstrated for
14 fumigation certification classes many times the
15 handling of Fumitoxin tablets using 'demonstration
16 tablets.'" So what are you showing them when you use
17 these demonstration tablets?

18 A. The size that they're going to expect from the product.
19 How they're going to react when you pour them out. We
20 pour them onto a table and we see what happens to them.

21 Q. All right. And how many are in the -- is this pellets
22 or tablets?

23 A. One of -- yeah, a flask of each.

24 Q. Do you keep those on hand? Do you keep those
25 demonstration tablets on hand?

1 A. Yes, I have a few on hand, yes. They do break apart so
2 we have to replace those.

3 Q. You mean the tablet itself will break?

4 A. Yeah.

5 Q. It has "many of the same physical properties as
6 Fumitoxin but without the fumigant." What are the same
7 physical properties that it has, that the tablets have?

8 A. I'm sorry. The size, the shape of it, the geometry of
9 it. The Fumitoxin tablets that we get and pellets, are
10 very inconsistent in their surface. Some of them will
11 be as slick as the dummy tablets, the demonstration
12 tablets, some of them are not.

13 Q. What are the demonstration tablets made of?

14 A. Some kind of inert material. I don't know. Carbon, I
15 don't know. It's not -- it's not phosphine in them.
16 There's no phosphine in them.

17 Q. And there's no aluminum phosphide in there, correct?

18 A. Correct.

19 Q. Is there aluminum carbonate in them?

20 A. I don't know. I don't know what they're made of.

21 Q. Now, I believe Mr. Ryman -- I've seen emails where he
22 talks about boric acid and graphite.

23 A. That could be. I don't recall what he told me they
24 were made out of. It wasn't important at the time.

25 Q. All right. What about the -- so the size is the same,

1 right?

2 A. The size and the geometry is the same.

3 Q. Okay. And the geometry being what?

4 A. The curvature, the formation, the physical appearance.

5 Q. Is there a ridge around the dummy tablets?

6 A. They have a bit of a ridge around the edge of them.

7 Q. Is it the same size as the ridge on the Fumitoxin
8 tablets?

9 A. Very close, I've not measured it with a micrometer, but
10 yes, it appears to be the same.

11 Q. And what about the weight?

12 A. I've not measured it on a scale but they feel very much
13 the same. I would say they're comparable.

14 Q. Really?

15 A. Yes.

16 Q. Okay. And the slick outer surface, you're saying the
17 Fumitoxin is the same as the demonstration tablets?

18 A. I believe I said that the Fumitoxin is very
19 inconsistent. Sometimes it's that slick and sometimes
20 it is not.

21 Q. In your report, you say the -- your experience is "the
22 tablets are hard to stack by hand," now what tablets
23 are you talking about? Are you talking the
24 demonstration tablets?

25 A. Yes, sir.

1 Q. Okay. So you're telling the demonstration tablets "are
2 hard to stack by hand." Are the Fumitoxin tablets,
3 itself, hard to stack by hand?

4 A. I've never tried to place them by hand one on top of
5 another, that I know that they don't stack. When I'm
6 pouring them down into the surface, they bounce off
7 each other and roll around.

8 Q. And when you're pouring them onto a surface in your
9 class, you're pouring them onto what surface?

10 A. The dummy tablets?

11 Q. Yes, the dummy tablets.

12 A. Onto a table.

13 Q. All right. A flat surface?

14 A. Yes.

15 Q. Hard surface?

16 A. Yes, sir.

17 Q. And you're pouring them out and --

18 A. Yes.

19 Q. Okay. Don't you need some type of foundation for any
20 pile to form, a base to form?

21 A. I guess I don't understand what you're saying.

22 Q. Well, for anything to form, don't you need something
23 that creates a foundation to where it's got some
24 structure to it?

25 A. No, sir.

1 Q. No?

2 A. No, I mean, if you took sand and you poured it out on a
3 table it would make a pile, wouldn't it?

4 Q. All right. Have you ever tried to pile the dummy
5 tablets on the commodity as opposed to the flat
6 surface?

7 A. No, sir.

8 Q. So you don't know how the dummy tablets would react on,
9 say, peanuts?

10 A. I have not checked that, no.

11 Q. Okay. You don't know how the dummy tablets would stack
12 or pile or not if you put it on wheat or corn?

13 A. No, not the dummy tablets, no.

14 Q. Do you have any opinion as to whether the Fumitoxin
15 tablets are difficult to stack or pile?

16 A. My opinion is that it's difficult to stack them, yes.

17 Q. And that's based on your use of the demonstration
18 tablets, is that right?

19 A. Based on the application on top of product in the
20 field.

21 Q. Have you ever had a pile created?

22 A. No, sir.

23 Q. Okay. What's the basis of your saying that the
24 Fumitoxin tablets are hard to pile?

25 A. I -- I've not seen it happen.

1 Q. But you've never tried to pile them by hand, is that
2 correct?

3 A. No, sir.

4 Q. Have you seen Dale Mann's report?

5 A. No, sir.

6 Q. I think this is Exhibit 292.

7 MR. WIDIS: This photo.

8 MR. EPSTEIN: Okay.

9 MR. WIDIS: I believe it is, 292.

10 MR EPSTEIN: I'll accept your word for it.

11 MR. WIDIS: Okay. Let's -- it might not be
12 so let's mark it.

13 MR. EPSTEIN: Okay.

14 MR. WIDIS: Exhibit 323.

15 THE WITNESS: Okay.

16 (WHEREUPON, Exhibit Number 323 was marked for
17 identification and passed to the witness
18 for review)

19 BY MR. WIDIS:

20 Q. I'm showing you a photo that we received from Dale
21 Mann, which he said is Fumitoxin tablets that he
22 stacked by hand on peanuts, do you see that?

23 A. I see that.

24 Q. Does it appear possible to stack Fumitoxin tablets on
25 peanuts?

1 A. I guess, I have no idea how he did that. I don't see
2 -- I mean, what's the procedure here? But that looks
3 like a stack.

4 Q. I'm just asking you, does this seem scientifically
5 possible to stack Fumitoxin tablets?

6 A. I see a picture of it here.

7 Q. Does that mean yes?

8 A. That means yes. When was this taken?

9 Q. We can discuss that later.

10 MR. EPSTEIN: I'll tell you what. It looks
11 like you're getting into something new.
12 I would love to take at least a two
13 minute break.

14 MR. WIDIS: Sure.

15 (WHEREUPON, the deposition was recessed at
16 12:11 P.M. and reconvened at 12:15 P.M.)
17 (WHEREUPON, Exhibit Number 324 is marked for
18 identification and passed to the witness
19 for review)

20 BY MR. WIDIS:

21 Q. All right. I'm now showing you some email exchange
22 324.

23 A. Mr. Ryman?

24 Q. Yes. And these were provided to us through Mr. Ryman
25 and they seem to be in chronological order so if we

1 could flip to the back, we'll go through them.

2 A. The last page?

3 Q. Yes. You were -- this one is dated June 8th, 2013 from
4 you to Mr. Smiley, Jim Smiley.

5 A. Uh-huh.

6 Q. Who is Mr. Smiley?

7 A. Mr. Smiley would have been a representative from
8 Degesch and I don't remember what his position is.

9 Q. Had you dealt with him before?

10 A. No, sir.

11 Q. Okay. Why did you address your email to him?

12 A. I think I found his name on the web under Degesch. I
13 just did a search for someone from Degesch.

14 Q. Were you aware that Dennis Ryman was an expert for --
15 for Defense in this case at the time that you drafted
16 that email?

17 A. At that point, I don't think that I was.

18 Q. When you --

19 A. I don't believe I was at that point.

20 Q. You hadn't reviewed Mr. Ryman's testimony?

21 A. I would have to go back and check the dates. I don't
22 know why I would have gone to Mr. Smiley had I known
23 about Mr. Ryman, so -- this wasn't in relation to this
24 -- this case.

25 Q. Okay. Well, that's -- that's my question, then.

1 A. No, this -- this was in my -- my other work.

2 Q. Okay. You were asking for the angle of repose for
3 phosphine fumigant tablets.

4 A. Yes.

5 Q. All right. Now, why are you asking that question?

6 A. Because a question that -- that came from one of my
7 students in a class.

8 Q. And what was the question?

9 A. What's the angle of repose of the -- of the phosphine
10 tablets?

11 Q. Okay. Is that because the student believed that there
12 could be piling?

13 A. I have no idea why he asked that. That was just a
14 question that I got in class.

15 Q. All right. You didn't ask him why are you asking that?

16 A. No, sir. I didn't.

17 Q. They ask a question and you're going to find the
18 answer?

19 A. Well, that's my job.

20 Q. You have no idea why this question is being asked as to
21 what the angle of aluminum phosphine fumigant tablets?

22 A. I didn't ask him why he was asking, no.

23 Q. Did you think that might be of any -- that the answer
24 to that question might be of any relevance to the
25 Severn case?

1 A. At that time, no. Obviously, you know, here it is.

2 We've talked about it here, so you know -- it happened
3 that here it is in this case, but at that time, no.

4 Q. All right. Angle of repose means a pile and you're
5 determining the -- the steepness of the pile, correct?

6 A. The slope, yes.

7 Q. Slope. And you knew you were going to opine that there
8 basically is no slope of Fumitoxin tablets, aren't you?

9 A. No.

10 Q. I mean, you're saying -- aren't you saying that they
11 don't pile -- they -- you're basically saying that they
12 slide off each other and off the pile so you were
13 taking the position that you can't pile these tablets.

14 A. That it's hard to pile them, yes.

15 Q. And if there is an angle of repose then that refutes
16 your position that they're -- that they can't pile,
17 isn't that right?

18 A. That would determine how easily they're -- or how high
19 the pile would be if they did pile, yes.

20 Q. Right and they -- if the pile is --

21 A. Whatever a pile is. I don't know what a pile is, but
22 --

23 Q. To whatever extent --

24 A. Yes.

25 Q. -- you've got an angle of repose of a product then at

1 least it's going clump up at that point, right?

2 A. Yes.

3 Q. Okay. So you didn't feel that that was at all relevant
4 to the Severn case?

5 A. Not at that point. I wasn't thinking about that. I
6 was trying to answer his -- his question.

7 Q. All right. Well, you're -- you're getting ready to
8 write your expert report now, right? June 26, 2013 is
9 when your report comes out. This is June 8th?

10 A. Uh-huh. True.

11 Q. You've had discussions as to what -- and thoughts as to
12 what you're going to include in your expert report,
13 right?

14 A. Uh-huh. Yes.

15

16

17 Q. But the question of whether there was an angle of
18 repose for Fumitoxin just --

19 A. No.

20 Q. -- you didn't see any relevance whatsoever to the
21 Severn --

22 A. I -- I asked the question as a response to a question
23 that was asked of me in class.

24 Q. All right. Now, Jim Smiley writes to Dennis Ryman,
25 "Any thoughts on this. I can't imagine why this would

1 be of any consequence," correct?

2 A. Okay.

3 Q. Then Mr. Ryman writes to you calling you, "Dear Dr.
4 Jones," had you spoken to Mr. Ryman prior to that time?

5 A. No, sir.

6 Q. Prior to June 10th, 2013?

7 A. No, sir.

8 Q. And Mr. Ryman says, "I'm not sure this measurement has
9 been established, I've never seen a number. Please
10 contact if you have any questions or comments."

11 Then we've got an email from you back, looks like
12 the same day, two hours later to Mr. Ryman. "Thanks
13 for your reply, Dennis. If Degesch could supply my lab
14 with enough 'dummy' tablets and pellets, I will do the
15 analysis to determine this information, provide it to
16 you and then we could discuss any possible publication
17 of the data. We have a stored product research
18 facility here on the Oklahoma State University campus
19 complete with quality grad students looking....for
20 things like this to do!" See that?

21 A. Yes.

22 Q. You had these dummy tablets and pellets onsite though,
23 right?

24 A. I don't have very many in stock.

25 Q. Yes, just one flask?

1 A. Right.

2 Q. So you thought -- how many flasks or pellets did you
3 think you were going to -- flasks did you think you
4 were going to need to determine what the angle of
5 repose may be?

6 A. Well, he sent me one and so that's what we used.

7 Q. Didn't you already have one?

8 A. Yeah, but the one's that I had were all crumpled up and
9 I needed another one anyway so it was good to get more
10 product.

11 Q. Why did you think Degesch would be interested in this?

12 A. I don't know. It's publishable information if -- if
13 they would allow us to publish that. We do a lot of
14 angle of repose study in my lab so it's not unusual for
15 us to determine angles of repose of all kinds of
16 materials.

17 Q. And again -- and this you felt had nothing to do with
18 the Severn case?

19 A. It's publishable, interesting information so --

20 Q. Where it says, "I will do the analysis to determine
21 this information, provide it to you and we can discuss
22 any possible publication of the data." Did he request
23 you to provide it to him prior to that or is that your
24 idea you'll provide it.

25 A. That's my idea.

1 Q. All right. So this didn't -- all right. So now, we've
2 got that same morning, Mr. Ryman's responding back,
3 "I'll be happy to give your grad students something to
4 do. We will send a flask of each to your attention and
5 I appreciate your offer to help."

6 A. Uh-huh.

7 Q. Would you have liked more than one flask?

8 A. Sure. I'll take what I can get.

9 Q. Okay. You didn't ask him that.

10 A. No, I didn't ask for more.

11 Q. Okay. You said, "Dennis, This is awesome! Thanks! I'll
12 look for them. When we get the testing done, I'll
13 contact you and we can discuss the results." Why do
14 you think he'd be interested in the results?

15 A. It's his product. I would assume he'd want to know
16 what the results are. And I certainly would want to
17 discuss it with him before I offered any information to
18 outside sources because it's his product.

19 Q. So now, this is just a separate project, non-related to
20 the Severn that you think, "Hey, let's do this" and
21 this came from a student asking what you felt is an
22 innocuous question --

23 A. Yeah, one of my fumigation students.

24 Q. Were you all discussing piling of tablets at the time
25 you asked the question?

1 A. It was at the end of the day so I'm -- he just came up
2 afterwards and asked what the angle of repose was.

3 Q. Okay. And in that class you had talked about --

4 A. We had talked about the label.

5 Q. And you talked about make sure you don't allow the
6 tablets to pile, correct?

7 A. Yes, sir.

8 Q. All right. And Dennis says, "Great, I look forward to
9 hearing back from you."

10 Now, a week later or so on the 17th, Dennis asked
11 you, "Have you received the 'dummy' tablets and
12 pellets?" You see that?

13 A. Yes.

14 Q. Okay. And you respond to him on the 17th, "Yes!!
15 Thanks so much. Preliminary," I assume --

16 A. That's piling.

17 Q. -- piling.

18 A. Yes.

19 Q. "Hints at a small angle of repose because they bounce
20 and slide so easily. We'll do the official testing per
21 standard testing methods but we may do some additional
22 drop testing on them as well."

23 A. Uh-huh.

24 Q. "Is there any testing Degesch or you would like?
25 Thanks again. That was a fast response!"

1 Your preliminary piling, what angle of repose did
2 you get?

3 A. I didn't measure, but it was quite small.

4 Q. And you -- you could tell that by just looking?

5 A. Yes.

6 Q. All right. But there was some amount of piling of the
7 --

8 A. Very small, yes.

9 Q. Enough to where you felt there is an angle of repose.

10 A. Yes, sir.

11 Q. It's not flat, there's some -- some angle, but you're
12 going to do further testing.

13 A. Yes, sir.

14 Q. And you said we'll do "official testing." What did you
15 mean by that?

16 A. Out in the lab using our test facility, our -- our
17 equipment.

18 Q. Do you recall when you got the tablets?

19 A. I don't remember the exact day, but it would have been
20 between -- let's see where's our last email there --
21 between June 10th and June 17th.

22 Q. And did you do the preliminary piling testing
23 immediately upon receiving it?

24 A. No. It took us about a week to set that up.

25 Q. Okay. I'm talking about this preliminary?

1 A. Oh, the preliminary, yes.

2 Q. Yes.

3 A. When I first received them, I --

4 Q. And what did you do to --

5 A. -- I poured them out on my -- my desk in my office.

6 Q. Okay. Did they react the same way as the other tablets
7 that you had previous?

8 A. Yes, sir, they did.

9 Q. Then Mr. Ryman responds to you, "Carol, I can't think
10 of any testing we would like done but thanks for
11 asking. I should have forewarned you that these
12 'dummies' are made from a blend of boric acid and
13 graphite and weigh approximately 33% less than the
14 actual product so they will behave somewhat differently
15 than the real thing." Were you aware of that?

16 A. Not before he said that here.

17 Q. Okay. But as of June 17th, you knew that the dummy
18 tablets weighed a third less than the actual.

19 A. I don't know that I remembered that, but now that I see
20 it, yes, I did.

21 Q. You didn't put that in your report, though, did you?

22 A. I did not, no.

23 Q. You don't think that was significant?

24 A. No, sir.

25 Q. You're talking about the same physical properties as

1 Fumitoxin, that the ones you're using are a third less
2 in weight?

3 A. Yes. I don't think that would make a difference.
4 That's my opinion.

5 Q. "I would imagine" -- "I would imagine these differences
6 would probably make them bounce and slide a little more
7 than tablets/pellets made from ALP but I believe we can
8 still get a pretty good idea since they are the same
9 size and shape. Short of working with actual product I
10 don't know any other way of determining the angle."
11 That's what he said, right?

12 A. Yes, sir.

13 Q. And so Mr. Ryman is acknowledging here, isn't he, that
14 these dummy tablets, these demonstration tablets will
15 bounce and slide more than the real Fumitoxin, correct?

16 A. That's what he says and he also says we can "get a
17 pretty good idea."

18 Q. Okay. Do you agree that the demonstration tablets
19 bounce and slide a little more than the real Fumitoxin
20 tablets?

21 A. Yes, sir.

22 Q. Did you make any distinction about that in your report?

23 A. No, in my report I did say the information we had was
24 from the demonstration tablets though.

25 Q. And you're writing back that 17th again, "Dennis, I

1 thought they weren't quite as heavy."

2 A. Uh-huh.

3 Q. So you're basically acknowledging, yes, these are
4 lighter than the real tablets?

5 A. Yes, sir.

6 Q. Okay. And -- well, not and. "Yes, probably the bounce
7 scenario would be a little different." Am I reading
8 that right?

9 A. That's what it says here, yes.

10 Q. Now, I have a habit sometimes of not reading --
11 You're acknowledging here that the bounce is different
12 than the -- of the demonstration tablets is different
13 than the real Fumitoxin tablets, right?

14 A. Could you ask that again, please?

15 Q. Yes. In your statement, "Yes, probably the bounce
16 scenario would be a little different." That's you
17 acknowledging that the fact that you're getting
18 demonstration tablets and Fumitoxin tablets does make
19 them bounce differently?

20 A. A little differently, yes.

21 Q. Okay. "The angle of repose should be very close to the
22 actual product though. We'll make sure we make the
23 distinction between the real and dummy product in any
24 reports." All right. And do you think you did that?

25 A. If I were to report this research some place, yes, I

1 would do that.

2 Q. All right. So you weren't talking about in your report
3 that you were going to write for Severn then?

4 A. No, this is my research. This is not Severn work here.

5 Q. All right. Do you think you made the distinction
6 between the real and dummy tablets clear enough in your
7 report?

8 A. Yes, sir.

9 Q. The Severn report?

10 A. Yes, sir.

11 Q. "All reports will go back to you. If they look like
12 something that the industry can use, you'll have the
13 option to approve release of the information, of
14 course." You were hoping at this point to be able to
15 produce something that's publishable?

16 A. Yes.

17 Q. And I guess as a professor, it's publish or perish?

18 A. Not necessarily, but it is nice to publish.

19 Q. You said, "I'm working on a certain expert witness
20 report right now." Is that the Severn report you're
21 talking about?

22 A. No, sir.

23 Q. Which report is that?

24 A. That was the report for my Texas case that was two
25 weeks ago.

1 Q. And that's the bin -- is that -- the bin that
2 collapsed?

3 A. Yes, sir.

4 Q. Okay. "We'll get back to testing on dummy pellets
5 later this week. Rain has harvest put on hold here for
6 a few days. Just our luck...no rain for months...we get
7 the combine out and it starts raining!!!"

8 All right. So when you wrote your Severn report,
9 you had no intention of saying that the demonstration
10 tablets were a third lighter than the Fumitoxin
11 tablets?

12 A. I did not put that in there, no.

13 Q. Don't you think that would have been significant to
14 put?

15 A. No, sir.

16 Q. Why not?

17 A. It was not important information.

18 Q. A third less as to whether something would pile or not
19 is not -- not important to you?

20 A. In my opinion, it was not important.

21 Q. And the fact that it's made of an entirely different
22 material, graphite and boric acid, is not important to
23 you to put into your report?

24 A. It is my opinion it was not important.

25 Q. And the fact that you and Dennis Ryman discussed that

1 they bounce differently was not important enough for
2 you to put in your report, is that right?

3 A. That's my opinion.

4 Q. Okay. Now, Dennis is writing, "Carol, What's the
5 status of your work with the tablets and pellets? I
6 look forward to hearing back from you." That was July
7 3rd. Had you done any work -- any further work on the
8 tablets and pellets on July 3rd?

9 A. No, sir.

10 Q. Now, you produced some videos.

11 A. On YouTube, yes.

12 Q. Right. And when -- those are on YouTube?

13 A. Yes.

14 Q. Okay. And when did you create those?

15 A. I think those were created July 8th.

16 Q. Did you determine -- well, let's keep going. July 3rd
17 you're coming back to him. "Hi Dennis. We're
18 finishing harvest this week. We should have some
19 preliminary information in the next couple of weeks for
20 you! Have a happy 4th."

21 A. Yes.

22 Q. Now, so you still had not done those videos?

23 A. That's correct.

24 Q. And you hadn't done any other testing on the tablets or
25 pellets?

1 A. That's correct.

2 Q. Okay. And you're going to do it now after July 3rd.

3 A. Correct.

4 Q. After the July 4th weekend, basically.

5 A. Correct.

6 Q. Or holiday. And then Dennis writes you on Monday, July
7 8th. "Good morning Carol, Thanks for the update and I
8 hope you had a nice holiday. I also hope your harvest
9 went well and I look forward to hearing back from you
10 in a couple of weeks."

11 Now, July 12th, you're writing to him and you
12 called it "tablet question."

13 A. That -- yes, okay.

14 Q. Okay. "We have preliminary data for the phosphine
15 material you shipped to us." And the phosphine
16 material is -- what material is that?

17 A. That was my reference to the dummy tablets. It's not
18 phosphine. That's an incorrect word there.

19 Q. Okay. So basically should mean --

20 A. The dummy tablets.

21 Q. Dummy tablets. "There are also 2 videos. The files
22 are too large for our email carrier so you will be
23 receiving a Dropbox invitation soon and that will allow
24 you to view the video files."

25 Were this -- was this test done for the Severn

1 case or was it done --

2 A. No, sir.

3 Q. What was it done for?

4 A. For my research.

5 Q. And do you feel that determining the angle of repose of
6 demonstration tablets of aluminum phosphide product had
7 any impact or bearing whatsoever on your opinion as to
8 whether these tablets will stack?

9 A. No, sir.

10 Q. "The angle of repose for the tablets is about 12
11 degrees while the tablets is 20 degrees for the
12 pellets."

13 A. Yeah, that -- okay.

14 Q. I mean, I understand --

15 A. No, but that's --

16 Q. -- "while the tablets" shouldn't be there.

17 A. Right.

18 Q. I write emails too. So --

19 A. Right.

20 Q. All right. What you're saying is the, "The angle of
21 repose for the tablets is about 12 degrees...and 20
22 degrees for the pellets."

23 A. Pellets.

24 Q. Knowing that, would you agree that these demonstration
25 tablets do pile?

1 A. The demonstration tablets pile.

2 Q. Okay. "The tablets do not fit through the standard
3 funnel so we tested them with a PVC pipe drop." And
4 I've seen the video. The pellets you did through a --
5 a type of -- what would you call that?

6 A. It's a funnel.

7 Q. The metal funnel.

8 A. Yes.

9 Q. And drop them from what, two or three inches?

10 A. I don't remember the height. It's a standard height
11 through the ASAB standard so probably about a foot.

12 Q. And then it drops onto a flat, hard surface?

13 A. Yes, sir.

14 Q. Is there paper or plastic covering it?

15 A. There's paper.

16 Q. Paper, white paper?

17 A. White paper.

18 Q. And so the demonstration pellets fell a foot and landed
19 on a hard surface with paper --

20 A. Yes, sir.

21 Q. -- covered by paper. And for the tablets, you put them
22 in a PVC pipe and then lifted the PVC pipe and saw how
23 they --

24 A. That's correct.

25 Q. -- what the configuration of the pile was afterward.

1 A. Correct.

2 Q. All right. And did you measure the configuration of
3 the -- of the tablet pile after you removed the PVC
4 pipe?

5 A. That's where this angle came -- comes from here for the
6 tablets --

7 Q. So the test --

8 A. -- or -- yeah. The tablets is 12, pellets is 20.

9 Q. The testing that you did on -- on the -- is that now on
10 YouTube?

11 A. I believe so, yes.

12 Q. Is -- you measured it was 12 degrees for the tablets?

13 A. Yes.

14 Q. Okay. "I will ask Kevin to do the same for the pellets
15 so we can get that comparison also." Did Kevin later
16 do another --

17 A. Not yet.

18 Q. "I don't expect the result to be different but let's
19 test to see." And you're saying it's the same for the
20 pellets. That would mean put them in a PVC pipe?

21 A. Yes.

22 Q. Now, did you advise your student of the angle of repose
23 of phosphine -- of the tablets?

24 A. Did I advise him --

25 Q. The student who started this whole thing. Did you

1 advise him of what the angle of repose was for the
2 Fumitoxin?

3 A. I'm sorry, I don't understand your question.

4 Q. Sure. Your first page back here, a student had asked
5 you "what's the angle of repose"?

6 A. Oh, okay. I thought you meant my grad student. Okay.
7 Yes. Actually, I did tell him that.

8 Q. Do you know what he was doing with that?

9 A. I have no idea. May have been just for his own
10 interest. I don't know.

11 Q. Okay. And then what did you do with this information?

12 A. Nothing so far.

13 Q. You've asked Dennis, "Any additional testing Degesch
14 would like us to do? Would you mind if we took this a
15 little further for a publishable journal article as
16 long as we give Degesch credit?" So that's -- you're
17 hoping you can make some publishable article out of
18 this.

19 A. I would like that, yes.

20 Q. And but -- as of right now, you haven't?

21 A. We have not.

22 Q. Then Dennis writes on July 15th, "This is good
23 information and I appreciate your work." Did Dennis --
24 were you speaking on the phone to Dennis during any of
25 this time or is this all --

1 A. No. I've never --

2 Q. -- or this all -- all by email?

3 A. -- I've never spoke with Dennis on the phone.

4 Q. "The videos clearly demonstrate that stacking or piling
5 tablets or pellets is difficult at best." Is that what
6 you felt the video showed?

7 A. Yes.

8 Q. All right. And this is stacking tablets on a hard
9 surface with -- with paper covering it? That's --
10 that's where it's difficult to stack?

11 A. In light of this research, yes.

12 Q. "Can you imagine what happens when you drop either 20 -
13 25 feet? Maybe that is something we should consider,
14 although, I'm not sure the dummies will hold up to such
15 rough treatment. In answer to your question, if you
16 would like to take this work further for a publishable
17 journal article go for it." Let's -- let's just stop
18 there.

19 Why did you think that Dennis would be concerned
20 about dropping a tablet 20 to 25 feet?

21 A. I have no idea why -- why he was concerned about that.

22 Q. All right. Did you have any thoughts at all about this
23 being relevant to the Severn case?

24 A. Not particularly, although I knew that at this point
25 that he was involved with the Severn case, but that was

1 not my intention with this research, so --

2 Q. And do you know did the fact that it was 20 to 25 feet
3 and the testimony about the height from the top of the
4 peanut pile to the hatch was 20, 25 feet, did that ring
5 a bell at all?

6 A. Sure it did.

7 Q. All right. Did you think that, in your mind, did you
8 think maybe that's why Dennis would be interested in
9 what happens when you drop something 20 to 25 feet?

10 A. I have no idea why Dennis had that in mind.

11 Q. Okay. So you're totally blank in your mind, "Gee, I
12 don't know why he possibly would want to know that?"

13 A. Who knows why he wanted to know that.

14 Q. And as far as you're concerned, doesn't make a bit of
15 difference because this has nothing to do with the
16 Severn case. Is that what you're saying?

17 A. That's what I'm saying.

18 Q. Why did you pick 20 to 25 -- why are we talking 20 to
19 25 feet?

20 A. That's what he said here.

21 Q. All right. Then Dennis asked some questions about free
22 airspace existing in bushels of -- he mentions peanuts.
23 Now, we're not -- I'm not going to get into that right
24 now.

25 Your second paragraph of the July 15th from you

1 back to Dennis, you basically tell him you'll look into
2 the -- the space. In your second paragraph, "I would
3 like to test the 20 - 25 feet drop but I agree...I
4 don't think the dummy tablets can handle it. We'll set
5 up a test plan for publication style data and see what
6 we need to do. Thanks for your help." When you're
7 talking 20, 25 feet, are you talking about dropping it
8 20 to 25 feet onto a hard surface?

9 A. Yes, sir.

10 Q. Okay. And again, the only reason you're doing 20, 25
11 feet is because Dennis has brought it up?

12 A. That's true.

13 Q. Okay.

14 MR. WIDIS: I just want the number off of
15 that.

16 MR. EPSTEIN: 324.

17 MR. WIDIS: Thank you.

18 BY MR. WIDIS:

19 Q. Do you -- can you tell me how the videos are described
20 on YouTube?

21 A. I don't remember. I will have to get that information
22 for you.

23 Q. Let's turn to page 18 of your report.

24 A. 18.

25 Q. By your math, you've calculated that the surface area

1 of the peanut pile, if it was smooth would be at least
2 66,000 square feet, correct?

3 A. Yes, sir.

4 Q. Okay. And when you say "smooth," you don't mean smooth
5 like a table. You mean basically flat if you -- or if
6 you took -- the area of the pile, the surface area
7 would be 66,000 square feet.

8 A. The surface area of the pile, 66,000 square feet if it
9 had no indentations or any anomalies in the surface.

10 Q. I see. Depressions, ridges, valleys --

11 A. Exactly.

12 Q. -- that's what we're talking about?

13 A. Yes, sir.

14 Q. Okay. And it's your understanding, the peanuts would
15 have ridges or valleys or depressions?

16 A. As do all commodities.

17 Q. Okay. Would you agree that the -- really the relevant
18 area that we're talking about here as to where the tabs
19 would fall would be the distance that they can be
20 flung?

21 A. No.

22 Q. Would you agree that the fumigators would not be able
23 to reach all 66,000 square feet?

24 A. Yes.

25 Q. So would you agree that the relevant area that we're

1 talking about as to whether the tablets would be in
2 that area would be the area with which the applicators
3 could actually reach?

4 A. Ask that again, please?

5 Q. Yeah. The relevant area, with regard to our case,
6 wouldn't really be the 66,000 square feet of the
7 surface of the peanuts, but it would be the area in
8 which the fumigators could actually reach with their
9 tablets?

10 A. No, I don't agree with that.

11 Q. And why not?

12 A. Because when you fumigate, the gas goes in the -- the
13 entire volume.

14 Q. All right. But what you're talking about is -- let me
15 limit that.

16 What I thought you were talking about is you're
17 trying to come up with a reason why there would not be
18 piling of the tablets?

19 A. Correct.

20 Q. All right. So I'm not talking about the fumigation,
21 I'm talking about -- when you're talking about the
22 tablets themselves piling, you're saying there's 108
23 square feet if you put the tablets right next to each
24 other as compared to 66,000 square feet of surface
25 area.

1 A. Correct.

2 Q. All right. But would you agree that the relevant area
3 that we're talking about if you're concerned with
4 whether tablets can pile on the top of the peanuts,
5 would be the area that the fumigators could reach?

6 A. No, I don't agree with that because the tablets can
7 roll.

8 Q. So would the area be the space where the area -- the
9 distance that they could roll to?

10 A. Correct.

11 Q. All right. And would you agree that they're not going
12 to roll to all 66,000 square feet?

13 A. No, I don't agree with that. It's possible.

14 Q. Now, did you read Mr. Mueller's deposition?

15 A. Yes.

16 Q. All right. Now, he discussed when he distributes the
17 aluminum phosphide tablets from flasks and shakes and
18 they come out in a fan motion.

19 A. Okay.

20 Q. Is that your understanding as well, that they would
21 come -- that the tablets come out in a fan type
22 display?

23 A. Yes.

24 Q. So the area in front of that fan and behind the fan,
25 really wouldn't be reached with the tablets, would it?

1 A. It depends on how the -- the angle -- how the wrist is
2 rotated. It they're rotating like this (gesturing),
3 you get 360 distribution.

4 Q. Okay. Do you recall Dennis or Mr. Taylor or -- or
5 Brian Lilley -- Turner or Lilley saying they rotated
6 their wrist to distribute the fumigant?

7 A. Yes. They said those -- they rotated their wrists and
8 their --

9 Q. Are you sure they didn't say they moved their arm side
10 to side using their elbow --

11 A. I think we're getting into semantics there. It's
12 possible that it could have been just side to side, but
13 if they move their elbow, I'm thinking they've probably
14 got a rotation to it. That's my interpretation of it.

15 Q. That's your interpretation?

16 A. That's my interpretation.

17 Q. That they're doing it in a 360 motion when they're
18 inside, is that right?

19 A. Yes.

20 Q. Okay. And if they said they did it side to side, you'd
21 have no reason to disagree with that, right?

22 A. That's true.

23 Q. And if they did do it side to side then the areas in
24 the front or the back wouldn't really be relevant to
25 determine whether the tablets would land on the

1 peanuts?

2 A. I don't agree with that. I think they can bounce and
3 roll in different directions.

4 Q. Now, the dimensions of the flask -- you've used these
5 Fumitoxin flasks?

6 A. Yes.

7 Q. They have a narrower neck, correct?

8 A. Yes, sir.

9 Q. Do the tablets sometimes bridge inside that neck?

10 A. At first when the -- when the flask is full, they come
11 out slower and you have to shake them to get them
12 started, kind of like the ketchup bottle, and then they
13 come out faster.

14 Q. And when you shake it to break that blockage, do you
15 agree that they're going to fall straight down at that
16 point?

17 A. Not necessarily. I don't know that.

18 Q. You don't know one way or another whether they do or
19 not?

20 A. I don't know one way or the other.

21 Q. Okay. And if Mr. Mueller said in his deposition based
22 on his experience that's what's happened, you have no
23 reason to say that's incorrect?

24 A. I'd say that's what his experience is.

25 Q. Okay. Now, if there's a depression in the peanuts like

1 you say there's depression in all commodities, is it
2 possible that tablets could accumulate in a depression?

3 A. It's possible.

4 MR. WIDIS: Let's get this marked. This is
5 Exhibit 325.

6 (WHEREUPON, Exhibit Number 325 was marked for
7 identification and passed to the witness
8 for review)

9 BY MR. WIDIS:

10 Q. I'm showing you a picture and I'll represent to you
11 that's Fumitoxin tablets on peanuts. Does that appear
12 to be piling of peanuts -- piling of tablets to you?

13 A. It looks like they're collected there. I have no idea
14 how deep that is or how they got there. What -- what
15 is this a picture from?

16 Q. I'm just asking you does that appear to be Fumitoxin --
17 or to be tablets on peanuts?

18 A. That looks like tablets on peanuts, yes.

19 Q. All right. And do you believe it's possible for
20 tablets to result in that configuration?

21 MR. EPSTEIN: Objection to form.

22 THE WITNESS: Whatever condition this picture
23 was taken in, yes.

24 BY MR. WIDIS:

25 Q. Now, with regard to Turner and Lilley, you would agree

1 that there were areas that they could not see in the
2 dome when they would shine their flashlight, correct?

3 A. I agree. Correct.

4 Q. All right. And you would agree that they cannot
5 confirm whether there was piling in those areas that
6 they couldn't see, correct?

7 A. Correct.

8 Q. Now, they're looking straight down which would give
9 them a two-dimensional aspect of the peanuts, wouldn't
10 it? Length and width?

11 A. Uh-huh. But they can see depth.

12 Q. Okay. Can you tell me how deep the pile is on Exhibit
13 325?

14 A. Not from a two-dimensional picture.

15 Q. Okay. But you believe if it was live and you're
16 looking from the top of a dome and looking down, you
17 can tell how deep this pile of Fumitoxin tablets are?

18 A. It's possible, yes.

19 Q. And how would you do that?

20 A. In a three-dimensional just like I can look at you
21 right now and tell that your chair is behind you.

22 Q. You believe you would be able to see around this pile
23 to where you could tell the -- the depth of it?

24 A. It's possible, yes.

25 Q. Okay. Would you agree that there -- that Turner and

1 Lilley's arm movements would be limited by the size of
2 the opening?

3 A. Not necessarily. It would depend on how far they're
4 reaching down inside the dome.

5 Q. And did you read in their deposition how far they were
6 reaching down?

7 A. I don't remember what the distance was.

8 Q. Would you agree that there were some metal obstructions
9 that they had to work around when they -- when they
10 were working around that hatch?

11 A. Inside or outside?

12 Q. Within the headhouse.

13 A. Within the headhouse, outside the dome in the
14 headhouse, yes. There were some obstructions.

15 Q. All right. Let's just make sure we're clear. I'm
16 talking about when Turner and Lilley are inside the
17 headhouse reaching into the hatch, would you agree
18 there are metal posts or obstructions that they're
19 going to have to work around to reach into the hatch?

20 A. I don't know that to be a fact.

21 Q. Have you seen pictures of the headhouse?

22 A. I've seen after the fire, yes. The remnants of
23 whatever that was that they showed me pictures of.
24 It's hard to tell what they were, so --

25 Q. Have you seen any pictures of the headhouse before the

1 explosion? Let me -- have you seen any pictures of the
2 headhouse while it was still on top of the dome?

3 A. Not that would give me that information.

4 Q. Let me show you what we've marked Exhibit 234.

5 A. Okay.

6 Q. And I'm going to show you what we've marked as Exhibit
7 22.

8 (WHEREUPON, Exhibit Numbers 234 and 22
9 previously marked for identification
10 were passed to the witness for review)

11 BY MR. WIDIS:

12 Q. And as a basis for orienting it, I want to show you the
13 metal box here and then the metal box right here
14 (pointing).

15 A. Okay. So this is this piece here, so we're looking
16 like -- I'm not sure that box is where it was in this
17 picture because this doesn't look like the same
18 orientation to me.

19 Q. Do you see where the hatch is?

20 A. Here (pointing)?

21 Q. Right.

22 A. Okay.

23 Q. Do you -- is it your understanding that that's the
24 hatch that was removed by Turner and Lilley

25 A. I don't know that that is. This is the first time I've

1 seen this picture.

2 Q. Well, I'll represent to you that that's the hatch they
3 said they removed. Assume -- you can assume that.

4 A. I'm going to assume that. Okay.

5 Q. If that's the hatch, would you agree they had to work
6 around these metal posts and that that would cause an
7 obstruction?

8 A. I don't know that that would cause an obstruction to
9 their arm movement. Their bodies would have had to lay
10 across that or they would have had to step over it, I
11 mean outside of the dome, but I don't know that that
12 restricts their arm movement.

13 Q. Would you agree that the distance and location of where
14 Mr. Turner and Mr. Lilley were applying the tablets
15 could not be controlled by them?

16 A. Ask me that again. I'm sorry.

17 Q. Yes, would you -- would you agree that Mr. Turner and
18 Mr. Lilley couldn't control the distance or location of
19 where they're putting the tablets?

20 A. Where the -- where the tablets would end up, is that
21 your question? Of the ultimate landing of the tablets?

22 Q. Yes.

23 A. That's correct.

24 Q. And would you agree that Mr. Turner and Mr. Lilley --
25 let's put it his way -- would you agree that Mr. Turner

1 had no way of knowing where Mr. Lilley was putting the
2 tablets?

3 A. That's correct.

4 Q. And would you agree, again, Mr. Lilley had no idea
5 where Mr. Turner was putting the tablets?

6 A. I think they had a good estimate by watching each other
7 work, but no, there's no concrete data that supports
8 how many feet they were going to go.

9 Q. You said gravity would assist the scattering. That's a
10 little further down. And my question is what do you
11 mean by that? Let me find the exact language. You
12 said, "Finally, due to the 20-25 feet between the hatch
13 and the top of the pile," -- I see you've used the 20
14 to 25 feet, okay.

15 A. Uh-huh.

16 Q. "Between the hatch," but that's purely coincidental, I
17 take it.

18 MR. EPSTEIN: Objection to form.

19 BY MR. WIDIS:

20 Q. All right. "Finally, due to the 20-25 feet between the
21 hatch and the top of the pile, the slick surface of the
22 tablets, and the sloping sides of the pile created by
23 the angle of repose, gravity would have greatly
24 assisted the scattering...of the 49,000" --

25 MR. EPSTEIN: "Scattering and distribution."

1 MR. WIDIS: Thank you.

2 BY MR. WIDIS:

3 Q. "Scattering and distribution of the 49,000 tablets they
4 applied."

5 A. Correct.

6 Q. What do you mean by gravity would have assisted?

7 A. Gravity is a force that pulls things, obviously, in the
8 y-direction and the same thing that makes the pellets
9 fall, makes them scatter and move around because
10 gravity force is still -- is still happening until they
11 come to rest.

12 Q. And so basically, gravity is going to help it move
13 until it comes to a surface to where it needs to stop,
14 right?

15 A. Correct.

16 Q. And if it lands on a flat surface and we've said
17 there's a flat surface right underneath it, it's going
18 to stop there and --

19 A. If there's no bounce, yes.

20 Q. Right.

21 A. No bounce.

22 Q. And if there's not a bounce that's going to throw it
23 off, it's going to accumulate on that flat surface, is
24 that right?

25 A. If it's a straight down motion, yes.

1 Q. Okay. And if it's on a slope and gravity is helping it
2 move, it's going to keep moving until it comes up
3 against another object, correct?

4 A. Till that object's big enough for it to stop its
5 motion.

6 Q. And wouldn't gravity help it accumulate to where it
7 could slide and roll until it accumulates against
8 another object?

9 A. Gravity doesn't cause it to accumulate. It causes it
10 to keep rolling.

11 Q. Okay. And it would roll until it stops against another
12 object, is that right?

13 A. Correct.

14 Q. I mean that's what gravity would do. The laws of
15 gravity would cause it to move until it is a force that
16 causes it to stop.

17 A. There has to be another force that causes it to stop
18 that works against the gravity.

19 Q. Okay. And that could be a peanut or it could be
20 another Fumitoxin tablet, right?

21 A. It could be lots of things.

22 Q. Okay. You mentioned the Golden Peanut and I don't want
23 to get into your -- I don't want to get into your --
24 anything you've told them, confidential, I don't have a
25 problem.

1 A. Thank you.

2 Q. Was their project based -- did the project come to you
3 because there had been a prior fire at the Golden
4 Peanut facility?

5 A. No, sir.

6 Q. Had nothing to do with a fire?

7 A. No, sir.

8 Q. Were you ever advised that there was a fire at a peanut
9 -- a Golden Peanut facility?

10 A. No, sir.

11 Q. All right. Let me take a few minutes and we'll see if
12 we can wrap this up.

13 MR. EPSTEIN: That would be great.

14 (WHEREUPON, the deposition was recessed at
15 1:00 p.m. and reconvened at 1:07 p.m.)

16 BY MR. WIDIS:

17 Q. Dr. Jones, page 2 of your report.

18 A. My report, okay.

19 Q. The first paragraph, the last sentence.

20 A. Page 2. Okay.

21 Q. We have, "If necessary, additional reports may be
22 submitted to reflect any changes to my conclusions
23 arising from analysis of additional information." Why
24 is that sentence included in your report?

25 A. In case any information that has not been divulged to

1 me at the time that this report becomes available then
2 I want to be able to make any additions if I need to.

3 Q. Were you ever advised that it would be improper to
4 review additional material or issue a supplemental
5 report?

6 A. No.

7 Q. Do you intend to rely on the test that you did on July
8 8th to support your opinion as to the piling of tablets
9 in this case?

10 A. No, sir.

11 Q. You did a research project on the hazards of phosphine,
12 is that right? Do you remember that?

13 A. No, sir. Not a research project on the hazards of
14 phosphine?

15 Q. I'm talking about the project you did where you all
16 considered making some device that would cause the
17 tablets to react outside of the structure and you could
18 then pump the gas into a closed looped system?

19 A. Correct.

20 Q. Okay. What did you call that project?

21 A. It didn't have a name. It was our closed loop cabinet
22 project. I mean that was the informal name. It was
23 never published.

24 Q. Okay. Thank you. That's all I have.

25 MR. EPSTEIN: I have no questions.

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(WHEREUPON, the deposition was concluded at

1:09 P.M.)

* * * * *

S I G N A T U R E P A G E

IN RE: SEVERN PEANUT CO., INC., et als, vs.
 INDUSTRIAL FUMIGANT CO., et al.

DEPOSITION OF: CAROL L. JONES, Ph.D.

TAKEN: OCTOBER 10, 2013

I have read the foregoing pages, 1 through 190,
and find that they contain a correct transcription of the
answers made by me to the questions therein recorded, with
the exception of _____ corrections as listed on a separate
sheet of paper and incorporated into this record.

Carol L. Jones

E R R A T A S H E E T

TO THE DEPOSITION OF

CAROL L. JONES, Ph.D.

Please read your deposition carefully.

Do not mark or write on the deposition itself.

List any corrections you may have by page and line number on this sheet.

Return to: Laura Riley Bridges, Bridges Court Reporting,
Inc., P.O. Box 2156, Rutherfordton, North Carolina 28139
within 30 days.

PAGE NO.	LINE NO.	CORRECTIONS	REASON FOR CORRECTION
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Bridges Court Reporting

~~828-429-7839~~

STATE OF NORTH CAROLINA)
COUNTY OF RUTHERFORD)

C E R T I F I C A T E

I, Laura Riley Bridges, Verbatim Reporter and Notary Public, do hereby certify that CAROL L. JONES, Ph.D. was duly sworn by me prior to the taking of this deposition; that said deposition was taken by me and transcribed under my supervision and direction; and that the foregoing pages constitute a verbatim transcript of the testimony of the said CAROL L. JONES, Ph.D. I do further certify that the persons were present as stated.

I do further certify that I am not of counsel for or in the employment of any parties to this action, nor do I have any interest, financial or otherwise, in the outcome thereof.

IN WITNESS WHEREOF, I have hereunto subscribed my name, this 28th day of October, 2013.



Laura Riley Bridges
Notary No.: 200909700079

Bridges Court Reporting
828-429-7839

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